

U.S. DEPARTMENT OF ENERGY
NOTICE OF FINANCIAL ASSISTANCE AWARD
(See Instructions on Reverse)

Under the authority of Public Law 95-91 DOE Organization Act, and P.L. 95-224 Federal Grant and Cooperative Agreement Act as amended by P.L. 97-258 and subject to legislation, regulations and policies applicable to (cite legislative program title): _____

1. PROJECT TITLE				2. INSTRUMENT TYPE <div style="display: flex; justify-content: space-between;"><input type="checkbox"/> GRANT<input type="checkbox"/> COOPERATIVE AGREEMENT</div>																																																											
3. RECIPIENT (Name, address, zip code, area code and telephone no.)				4. INSTRUMENT NO. DE-		5. AMENDMENT NO.																																																									
8. RECIPIENT PROJECT DIRECTOR (Name and telephone no.) INSERT PHONE NO.				10. TYPE OF AWARD <div style="display: flex; flex-wrap: wrap;"><div style="width: 50%;"><input type="checkbox"/> NEW</div><div style="width: 50%;"><input type="checkbox"/> CONTINUATION</div><div style="width: 50%;"><input type="checkbox"/> RENEWAL</div><div style="width: 50%;"><input type="checkbox"/> REVISION</div><div style="width: 50%;"><input type="checkbox"/> SUPPLEMENT</div></div>																																																											
9. RECIPIENT BUSINESS OFFICER (Name and telephone no.) INSERT PHONE NO.				12. ADMINISTERED FOR DOE BY (Name, address, zip code, telephone no.) National Energy Technology Laboratory ATTN: ADDRESS ADDRESS INSERT PHONE NO.																																																											
11. DOE PROJECT OFFICER (Name, address, zip code, telephone no.) National Energy Technology Laboratory ATTN: ADDRESS ADDRESS INSERT PHONE NO.				13. RECIPIENT TYPE <div style="display: flex; flex-wrap: wrap; padding: 5px;"><div style="width: 20%;"><input type="checkbox"/> STATE GOV'T</div><div style="width: 20%;"><input type="checkbox"/> INDIAN TRIBAL GOV'T</div><div style="width: 20%;"><input type="checkbox"/> HOSPITAL</div><div style="width: 20%;"><input type="checkbox"/> FOR PROFIT ORGANIZATION</div><div style="width: 20%;"><input type="checkbox"/> INDIVIDUAL</div><div style="width: 20%;"><input type="checkbox"/> LOCAL GOV'T</div><div style="width: 20%;"><input type="checkbox"/> INSTITUTION OF HIGHER EDUCATION</div><div style="width: 20%;"><input type="checkbox"/> OTHER NONPROFIT ORGANIZATION</div><div style="width: 20%;"><input type="checkbox"/> C</div><div style="width: 20%;"><input type="checkbox"/> P</div><div style="width: 20%;"><input type="checkbox"/> SP</div><div style="width: 20%;"><input type="checkbox"/> OTHER (Specify) _____</div></div>																																																											
14. ACCOUNTING AND APPROPRIATIONS DATA: <table border="1" style="width:100%; border-collapse: collapse;"><tr><td style="width: 25%; padding: 2px;">a. Appropriation Symbol</td><td style="width: 25%; padding: 2px;">b. B&R Number</td><td style="width: 25%; padding: 2px;">c. FT/AFP/OC</td><td style="width: 25%; padding: 2px;">d. CFA Number</td></tr></table>				a. Appropriation Symbol	b. B&R Number	c. FT/AFP/OC	d. CFA Number	15. EMPLOYER I.D. NUMBER																																																							
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16. BUDGET AND FUNDING INFORMATION <table border="1" style="width:100%; border-collapse: collapse;"><thead><tr><th colspan="4" style="width: 50%; padding: 2px;">a. CURRENT BUDGET PERIOD INFORMATION</th><th colspan="4" style="width: 50%; padding: 2px;">b. CUMULATIVE DOE OBLIGATIONS</th></tr></thead><tbody><tr><td style="width: 35%; padding: 2px;">(1) DOE Funds Obligated This Action</td><td style="width: 15%; padding: 2px;">\$</td><td style="width: 10%; padding: 2px;">_____</td><td style="width: 10%; padding: 2px;"></td><td style="width: 35%; padding: 2px;">(1) This Budget Period</td><td style="width: 15%; padding: 2px;">\$</td><td style="width: 10%; padding: 2px;">_____</td><td style="width: 10%; padding: 2px;"></td></tr><tr><td style="padding: 2px;">(2) DOE Funds Authorized for Carry Over</td><td style="padding: 2px;">\$</td><td style="padding: 2px;">_____</td><td style="padding: 2px;"></td><td style="padding: 2px;">[Total of lines a.(1) and a.(3)]</td><td style="padding: 2px;"></td><td style="padding: 2px;"></td><td style="padding: 2px;"></td></tr><tr><td style="padding: 2px;">(3) DOE Funds Previously Obligated in this Budget Period</td><td style="padding: 2px;">\$</td><td style="padding: 2px;">_____</td><td style="padding: 2px;"></td><td style="padding: 2px;">(2) Prior Budget Periods</td><td style="padding: 2px;">\$</td><td style="padding: 2px;">_____</td><td style="padding: 2px;"></td></tr><tr><td style="padding: 2px;">(4) DOE Share of Total Approved Budget</td><td style="padding: 2px;">\$</td><td style="padding: 2px;">_____</td><td style="padding: 2px;"></td><td style="padding: 2px;">(3) Project Period to Date</td><td style="padding: 2px;">\$</td><td style="padding: 2px;">_____</td><td style="padding: 2px;"></td></tr><tr><td style="padding: 2px;">(5) Recipient Share of Total Approved Budget</td><td style="padding: 2px;">\$</td><td style="padding: 2px;">_____</td><td style="padding: 2px;"></td><td style="padding: 2px;">[Total of lines b.(1) and b.(2)]</td><td style="padding: 2px;"></td><td style="padding: 2px;"></td><td style="padding: 2px;"></td></tr><tr><td style="padding: 2px;">(6) Total Approved Budget</td><td style="padding: 2px;">\$</td><td style="padding: 2px;">_____</td><td style="padding: 2px;"></td><td style="padding: 2px;"></td><td style="padding: 2px;"></td><td style="padding: 2px;"></td><td style="padding: 2px;"></td></tr></tbody></table>								a. CURRENT BUDGET PERIOD INFORMATION				b. CUMULATIVE DOE OBLIGATIONS				(1) DOE Funds Obligated This Action	\$	_____		(1) This Budget Period	\$	_____		(2) DOE Funds Authorized for Carry Over	\$	_____		[Total of lines a.(1) and a.(3)]				(3) DOE Funds Previously Obligated in this Budget Period	\$	_____		(2) Prior Budget Periods	\$	_____		(4) DOE Share of Total Approved Budget	\$	_____		(3) Project Period to Date	\$	_____		(5) Recipient Share of Total Approved Budget	\$	_____		[Total of lines b.(1) and b.(2)]				(6) Total Approved Budget	\$	_____					
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17. TOTAL ESTIMATED COST OF PROJECT \$ _____ <i>(This is the current estimated cost of the project. It is not a promise to award nor an authorization to expend funds in this amount.)</i>																																																															
18. AWARD AGREEMENT TERMS AND CONDITIONS This award/agreement consists of this form plus the following: a. Special terms and conditions. b. Applicable program regulations (specify) _____ (Date) _____. c. DOE Assistance Regulations, 10 CFR Part-600, as amended. d. Application/proposal dated _____, <input type="checkbox"/> as submitted <input type="checkbox"/> with changes as negotiated.																																																															
19. REMARKS																																																															
20. EVIDENCE OF RECIPIENT ACCEPTANCE <div style="display: flex; justify-content: space-between;"><div style="width: 45%;"><div style="border-bottom: 1px solid black; margin-bottom: 5px;"></div><div style="text-align: center; font-size: small;">(Signature of Authorized Recipient Official)</div><div style="border-bottom: 1px solid black; margin-bottom: 5px;"></div><div style="text-align: center; font-size: small;">(Name)</div><div style="border-bottom: 1px solid black; margin-bottom: 5px;"></div><div style="text-align: center; font-size: small;">(Title)</div></div><div style="width: 45%;"><div style="border-bottom: 1px solid black; margin-bottom: 5px;"></div><div style="text-align: center; font-size: small;">(Date)</div></div></div>				21. AWARDED BY <div style="display: flex; justify-content: space-between;"><div style="width: 45%;"><div style="border-bottom: 1px solid black; margin-bottom: 5px;"></div><div style="text-align: center; font-size: small;">(Signature)</div><div style="border-bottom: 1px solid black; margin-bottom: 5px;"></div><div style="text-align: center; font-size: small;">(Name)</div><div style="border-bottom: 1px solid black; margin-bottom: 5px;"></div><div style="text-align: center; font-size: small;">Contracting Officer</div><div style="text-align: center; font-size: small;">(Title)</div></div><div style="width: 45%;"><div style="border-bottom: 1px solid black; margin-bottom: 5px;"></div><div style="text-align: center; font-size: small;">(Date)</div></div></div>																																																											

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SECTION II - SPECIAL TERMS AND CONDITIONS

PREVAILING REGULATIONS (MAY 2002)

As indicated on the face page, Block 18c, this award is subject to the DOE Assistance Regulations of Title 10, Code of Federal Regulations, Part 600. This set of regulations may be found in most major libraries or on the World Wide Web at: http://www.access.gpo.gov/nara/cfr/cfrhtml_00/Title_10/10cfr600_00.html

ORDER OF PRECEDENCE (AUG 2001)

In the event of any inconsistency among the provisions of this agreement, the inconsistency shall be resolved by giving precedence as follows: (a) applicable public laws; (b) 10 CFR Part 600; (c) the special terms and conditions; and (d) other documents, exhibits and attachments.

APPLICABLE IF THE AWARD IS A COOPERATIVE AGREEMENT STATEMENT OF SUBSTANTIAL INVOLVEMENT (AUG 2003)

[SPECIALIST: Explicitly state the substantial involvement anticipated between DOE and the Recipient. The language should specifically describe the project activities, which have DOE collaboration, participation, or intervention. The following types of activities are generally viewed as substantial involvement, however, should be tailored to the specific circumstances of the award. MAKE SURE YOU DELETE THE THINGS YOU DO NOT INTEND TO DO]

RECIPIENT'S RESPONSIBILITIES. The Recipient is responsible for:

- Performing the activities supported by this award, including providing the required personnel, facilities, equipment, supplies and services;

- Defining approaches and plans, submitting the plans to DOE for review, and incorporating DOE comments;

- Managing and conducting the project activities, including coordinating with a DOE M&O contractor on activities performed under the M&O contract that are related to the project;

- Attending semiannual program review meetings and reporting project status;

- Submitting technical reports and incorporating DOE comments; and;

- Presenting the project results at appropriate technical conferences or meetings as directed by the DOE Project Officer (number of conferences/meetings will not exceed [INSERT NUMBER OF CONFERENCES]).

DOE RESPONSIBILITIES. DOE is responsible for:

- Reviewing in a timely manner project plans, including technology transfer plans, and redirecting the work effort if the plans do not address critical programmatic issues;

- Conducting semiannual program review meetings to ensure adequate progress and that the work accomplishes the program and project objectives. Redirecting work or shifting work emphasis, if needed;

- Promoting and facilitating technology transfer activities, including disseminating program results through presentations and publications; and

- Serving as scientific/technical liaison between awardees and other program or industry staff.

THIS CLAUSE WILL BE INCLUDED IF THE AGREEMENT CONTAINS COST SHARING AND COSTS ARE TO BE SHARED ON A COST INCURRED BASIS
COST SHARING (MAR 2001)

The total estimated cost for the work to be accomplished under this award is [\$]. The Recipient and the Government agree to share the allowable project costs, as costs are incurred, in accordance with the following ratios:

DOE:	[]%
Recipient:	[]%
Total:	100%

THIS CLAUSE WILL BE INCLUDED IF THE AGREEMENT CONTAINS COST SHARING AND THERE IS IN-KIND COST SHARING OR WHEN COSTS WILL BE SHARED ON AN ELEMENT BY ELEMENT BASIS.
COST SHARING (JUNE 2003)

The total estimated cost for the work to be accomplished under this award is [\$]. The Recipient and the Government agree to share the allowable project costs under this award as follows:

DOE:	[]%
Recipient:	[]%
Total:	100%

The Recipient's anticipated source of cost-sharing is identified [INSERT "below" OR in Attachment C, Budget Pages of this award. [CONTRACT SPECIALIST: IF YOU SPECIFY THAT THE COST SHARING IS IDENTIFIED IN THE BUDGET FORM, MAKE SURE THAT THE GOVERNMENT AND THE RECIPIENT SHARES ARE SEGREGATED UNDER SECTION B OF THE FORM FOR EACH BUDGET PERIOD.]. When these costs are expended, they will be identified as the Recipient's contribution and provided as backup information to the SF272 or the SF270 depending upon the method of payment.

The respective cost-share percentages shall be achieved by the completion or termination date of this award. In the event the award is completed or terminated and the Recipient has not shared []% of the allowable costs, the Recipient will refund to the DOE an amount such that the Recipient's share ratio is []%.

APPLICABLE IF THE BUDGET PERIOD IS NOT FULLY FUNDED
FUNDING (SEPT 2000)

This award is to be incrementally funded. The DOE has currently obligated \$[INSERT FUNDING AMOUNT] and anticipates, subject to the availability of additional funds, obligating the DOE balance of \$[INSERT REMAINING AMOUNT TO BE FUNDED]. The Recipient shall not be obligated to continue performance of this project beyond the amount set forth in Block 16(b)(3) of the DOE F 4600.1 and the DOE is under no commitment to provide additional funding to the Recipient beyond this amount.

APPLICABLE IN SPECIAL SITUATIONS WHERE FUNDING IS TO BE MADE AVAILABLE BEYOND THE CURRENT BUDGET PERIOD
FORWARD FUNDING (SEPT 2003)

DOE has obligated \$[INSERT TOTAL AMOUNT OF FUNDS OBLIGATED] for performance of work under this agreement, however, only \$[INSERT DOE SHARE OF BUDGET PERIOD COSTS] is available for work performed by the Recipient during Budget Period [INSERT BUDGET PERIOD NUMBER(S)] of the Project.

Any costs incurred by the Recipient that would result in a DOE cost share greater than \$[INSERT DOE SHARE OF BUDGET PERIOD COSTS] for this Budget Period, are unallowable without the prior written approval of the DOE Contracting Officer. Authorization to expend any additional funds beyond this amount is contingent upon the submission by the Recipient of a continuation application to proceed into subsequent Budget Period(s) and written approval of the continuation application by the DOE Contracting Officer.

In the event that the Recipient does not submit a continuation application for subsequent Budget Periods or DOE disapproves a continuation application for subsequent Budget Periods, the maximum DOE liability to the Recipient is the funds that are available for the current approved Budget Period(s). In such event, DOE reserves the right to deobligate any remaining funds.

APPLICABLE IF PREAWARD COSTS ARE AUTHORIZED BEYOND THE 90 DAYS ALLOWED BY 10 CFR 600.125

ALLOWABLE PREAWARD COSTS (MAR 1999)

The Recipient is entitled to reimbursement of preaward costs in the amount not to exceed [] of DOE obligations. These costs are limited to work associated with performance of [], incurred during the period starting on [] through the effective start date of this award (Block 7, DOE F 4600.1).

APPLICABLE IF THE AWARD CONTAINS MORE THAN ONE BUDGET PERIOD AND CONTINUATION APPLICATIONS WILL BE REQUIRED.

CONTINUATION APPLICATION (AUG 2001)

Funding for each budget period within the approved project period shall be contingent on DOE approval of a continuation application submitted no later than 60 days prior to the end of the current budget period. The continuation application shall be submitted on the SF 424. Technical and budgetary information supporting the continuation application shall be provided in accordance with 10 CFR 600.26. Forms for submission of continuation applications can be found at <http://www.netl.doe.gov/business/index.html>.

INCLUDE IF THE PAYMENT IS MADE IN ADVANCE THROUGH ASAP. THIS IS THE PREFERRED METHOD OF PAYMENT FOR NONPROFIT ORGANIZATIONS, STATE AND LOCAL GOVERNMENTS, AND INSTITUTIONS OF HIGHER EDUCATION AND SHOULD BE USED WHENEVER PRACTICABLE UNLESS THE CO DETERMINES THAT THE RECIPIENT DOES NOT HAVE A FINANCIAL MANAGEMENT SYSTEM THAT MEETS THE STANDARDS FOR FUND CONTROL AND ACCOUNTABILITY AS ESTABLISHED IN 600.121. MAKE SURE YOU SELECT THE SF272, FEDERAL CASH TRANSACTION REPORT AS PART OF THE REPORTING REQUIREMENTS.
PAYMENT PROCEDURES – ADVANCES THROUGH ASAP (JULY 2004)

- (a) Method of Payment. Payment will be made by advances through the Department of Treasury's Automated Standard Application for Payments system (ASAP).
- (b) Requesting Advances. You may submit requests as frequently as required to meet your needs to disburse funds for the Federal share of project costs. If feasible, you should time each request so that you receive payment on the same day that you disburse funds for direct project costs and the proportionate share of any allowable indirect costs. If same-day transfers are not feasible, advance payments must be as close as is administratively feasible to actual disbursements.
- (c) Adjusting payment requests for available cash. You must disburse any funds that are available from program income, rebates, refunds, contract settlements, audit recoveries, and interest earned on any of those funds before requesting additional cash payments from DOE.
- (d) Payments. All payments are made by electronic funds transfer to the bank account identified on the ASAP Bank Information Form that you filed with the U.S. Department of Treasury.

[PREFERRED METHOD FOR AWARDS TO FOR-PROFIT ORGANIZATIONS AND OTHER RECIPIENTS IF THERE ARE SPECIAL AWARD CONDITIONS THAT REQUIRE THE REIMBURSEMENT METHOD OF PAYMENT AND COST DETAIL IS NOT REQUIRED TO BE SUBMITTED. COST DETAIL CAN ONLY BE OBTAINED BY USING THE ACH METHOD OF PAYMENT.]

PAYMENT PROCEDURES – REIMBURSEMENT THROUGH ASAP (JULY 2004)

- (a) Method of Payment. Payment will be made by reimbursement through the Department of Treasury's Automated Standard Application for Payments system (ASAP).
- (b) Requesting Reimbursement. Requests for reimbursements must be made through the Department of Treasury's Automated Standard Application for Payments system (ASAP). Your requests for reimbursement should coincide with your normal billing pattern, but not more frequently than biweekly. Each request must be limited to the amount of disbursements made for the federal share of direct project costs and the proportionate share of allowable indirect costs incurred during that billing period.
- (c) Adjusting payment requests for available cash. You must disburse any funds that are available from program income, rebates, refunds, contract settlements, audit recoveries, and interest earned on any of those funds before requesting additional cash payments from DOE.
- (d) Payments. All payments are made by electronic funds transfer to the bank account identified on the ASAP Bank Information Form that you filled with the U.S. Department of Treasury.

[PREFERRED METHOD FOR ACH PAYMENTS. USE FOR AWARDS TO FOR-PROFIT ORGANIZATIONS AND OTHER RECIPIENTS IF THERE ARE SPECIAL AWARD CONDITIONS THAT REQUIRE THE REIMBURSEMENT METHOD OF PAYMENT AND COST DETAIL IS REQUIRED TO BE SUBMITTED. THIS METHOD USES AN ELECTRONIC SF-270 REQUEST.]

PAYMENT PROCEDURES – ACH VIPERS (JULY 2004)

- (a) Method of Payment. Payment will be made by reimbursement through the Automated Clearing House (ACH).
- (b) Requesting Reimbursement through ACH. You must submit a Standard Form 270, "Request for Advance or Reimbursement" and attach a file containing appropriate supporting documentation, electronically through the U.S. Department of Energy's Oak Ridge Financial Service Center (ORFSC) Vendor Inquiry Payment Electronic Reporting System (VIPERS) at <https://finweb.oro.doe.gov/vipers.htm>. The file attachment must show the total federal share claimed on the SF 270, the non-federal share claimed for the billing period if cost sharing is required, and cumulative expenditures to date (both federal and non-federal) for each of the following categories: salaries/wages and fringe benefits; equipment; travel; participant/training support costs, if any; other direct costs, including subawards/contracts; and indirect costs.

To access and use VIPERS, you must enroll at <https://finweb.oro.doe.gov/vipers.htm>. Detailed instructions on how to enroll and use the system are provided on this web site. VIPERS also allows you to check the status of your payments.

- (c) Timing of submittals. Submittal of the SF 270 should coincide with your normal billing pattern, but no more frequently than biweekly. Requests for reimbursement must be limited to the amount of disbursements made during the billing period for the federal share of direct project costs and the proportionate share of any allowable indirect costs.
- (d) Adjusting payment requests for available cash. You must disburse any funds that are available from program income, rebates, refunds, contract settlements, audit recoveries, and interest earned on any of those funds before requesting additional cash payments for DOE:
- (e) Payments. Upon receipt of an invoice payment authorization from the DOE approving official, the ORFSC will disburse payment to you. The DOE approving official will approve the invoice as soon as practicable but not later than 30 days after your request is received, unless the billing is improper. All payments are made by electronic funds transfer to the bank account identified on the ACH Vendor/Miscellaneous Payment Enrollment Form (SF 3881) that you filed.

USE FOR AWARDS TO FOR-PROFIT ORGANIZATIONS AND OTHER RECIPIENTS IF THERE ARE SPECIAL AWARD CONDITIONS THAT REQUIRE THE REIMBURSEMENT METHOD OF PAYMENT

AND COST DETAIL IS REQUIRED TO BE SUBMITTED AND THE RECIPIENT WILL BE SUBMITTING HARD COPIES OF THE INVOICES INSTEAD OF USING VIPERS.

PAYMENT PROCEDURES -- ACH (JULY 2004)

- (a) Method of Payment. Payment will be made by reimbursement through the Automated Clearing House (ACH).
- (b) Requesting Reimbursement through ACH. You must submit a SF 270, "Request for Advance or Reimbursement" and appropriate supporting documentation to the address listed below. The supporting documentation must show the total federal share claimed on the SF 270, the non-federal share claimed for the billing period if cost sharing is required, and cumulative to date (both Federal and non-Federal) for each of the following categories: salaries/wages and fringe benefits; equipment; travel; participant/training support costs, if any; other direct costs, including subawards/contracts; and indirect costs.

Mail original to:
U.S. Department of Energy
Oak Ridge Financial Service Center
P.O. Box 4787
Oak Ridge, TN 37831
- (c) Timing of submittals. Submittal of the SF 270 should coincide with your normal billing pattern, but no more frequently than biweekly. Requests for reimbursement must be limited to the amount of disbursements made during the billing period for the federal share of direct project costs and the proportionate share of any allowable indirect costs. If you are authorized to receive advance payments, you must time requests for advances so that you receive payment as close as is administratively feasible to actual disbursements.
- (d) Adjusting payment requests for available cash. You must disburse any funds that are available from program income, rebates, refunds, contract settlements, audit recoveries, and interest earned on any of those funds before requesting additional cash payments for DOE:
- (e) Payments. Upon receipt of an invoice payment authorization from the appropriate DOE approving official, the ORFSC will disburse payments to you. The DOE approving official will approve the invoice as soon as practicable but not later than 30 days after your request is received, unless the billing is improper. All payments are made by electronic funds transfer to the bank account identified on the ACH Vendor/Miscellaneous Payment Enrollment Form (SF 3881) that you filed.

INCLUDE IF A SUPPORT CONTRACTOR PROCESSES PAPER INVOICES THRU ACH. DO NOT USE THIS CLAUSE IF ASAP IS USED.

NOTICE OF INVOICE PROCESSING BY SUPPORT CONTRACTOR (DEC 1999)

A support service contractor performs the function of processing of all invoices submitted to the National Energy Technology Laboratory, against its awards. Therefore, this contractor has access to your business confidential cost/rate information. A special provision in this contractor's award requires the confidential treatment by all contractor employees of any and all business confidential information of other contractors and financial assistance recipients to which they have access.

ACKNOWLEDGMENT OF FEDERAL FUNDING (NOV 1998)

When issuing statements, press releases, requests for proposals, bid solicitations, and other documents describing this project, the Recipient shall clearly state (1) the percentage of the total cost of the project which will be financed with Federal money, and (2) the dollar amount of Federal funds for the project.

REAL PROPERTY - NONE (JAN 1999)

No real property may be acquired under this award.

APPLICABLE IF PROPERTY IS ACQUIRED UNDER THE AWARD AND AWARD IS MADE TO OTHER THAN A PROFIT ORGANIZATION.

RECIPIENT ACQUIRED PROPERTY (MAY 1999)

Reference Attachment [] for a listing of property authorized for acquisition under this award. Property acquired by the Recipient under this award shall be managed in accordance with 10 CFR 600.130 to 10 CFR 600.137, and reported as prescribed in Attachment B, Federal Assistance Reporting Checklist.

APPLICABLE IF PROPERTY IS ACQUIRED UNDER THE AWARD AND AWARD IS MADE TO A PROFIT ORGANIZATION.

RECIPIENT ACQUIRED PROPERTY - FOR-PROFIT ORGANIZATIONS (JAN 2004)

Reference Attachment [] for a listing of property authorized for acquisition under this award. Property acquired by the Recipient under this award shall be managed in accordance with 10 CFR 600.320 to 10 CFR 600.325, and reported as prescribed in Attachment B, Federal Assistance Reporting Checklist.

APPLICABLE IF PROPERTY IS NOT TO BE ACQUIRED UNDER THE AWARD

RECIPIENT ACQUIRED PROPERTY - NONE (JAN 1999)

No Recipient acquired property is anticipated under this award.

APPLICABLE IF THE GOVERNMENT WILL FURNISH PROPERTY AND AWARD IS MADE TO OTHER THAN A PROFIT ORGANIZATION.

FEDERALLY OWNED PROPERTY (GOVERNMENT-FURNISHED) (JAN 1999)

Reference Attachment [] for a listing of federally-owned property. Federally-owned property shall be managed in accordance with 10 CFR 600.133(a), and reported as prescribed in Attachment B, Federal Assistance Reporting Checklist.

APPLICABLE IF THE GOVERNMENT WILL FURNISH PROPERTY AND AWARD IS MADE TO A PROFIT ORGANIZATION

FEDERALLY OWNED PROPERTY (GOVERNMENT-FURNISHED) - FOR-PROFIT ORGANIZATIONS (JAN 2004)

Reference Attachment [] for a listing of federally-owned property. Federally-owned property shall be managed in accordance with 10 CFR 600.322, and reported as prescribed in Attachment B, Federal Assistance Reporting Checklist.

APPLICABLE IF THE GOVERNMENT WILL NOT FURNISH PROPERTY

FEDERALLY OWNED PROPERTY (GOVERNMENT-FURNISHED) - NONE (JAN 1999)

No Government-furnished property is provided under this award.

KEY PERSONNEL (APR 2002)

Recipient personnel considered to be essential and key to the work being performed hereunder are specified [INSERT THE WORDS" in Block 8 on the Face Page of this award." OR IN THE CASE WHERE THERE ARE SEVERAL KEY PERSONNEL NAMES INSERT THE WORD "below" AND LIST THE PERSONS. IT IS NOT NECESSARY TO LIST THE PERSONS IF ONLY ONE PERSON IS IDENTIFIED AND THAT NAME IS THE SAME AS THE ONE ON THE FACE PAGE OF THE AWARD.]

NAME	TITLE	TELEPHONE
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[]	[]	[]
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The personnel specified in this clause are considered to be essential to the project. Before removing or replacing any key personnel, the Recipient shall notify the Contracting Officer reasonably in advance and shall submit justification (including proposed substitutions) in sufficient detail to permit evaluation of the impact on the project. No key personnel may be substituted without the Contracting Officer's approval. Such approval shall be obtained in advance of the substitution, except that the Contracting Officer may ratify a substitution which, because of exigent circumstances, was made before the Recipient could request and/or obtain the Contracting Officer's approval.

APPLICABLE TO GRANTS

PAPERWORK REDUCTION - GRANTS (SEPT 2002)

The award is subject to the requirements of the Paperwork Reduction Act of 1980 as implemented by the Office of Management and Budget rules, "Controlling Paperwork Burdens on the Public," published at 5 CFR 1320. These requirements apply if the Recipient will collect information from ten (10) or more respondents at the specific request of DOE, or if the award requires specific DOE approval of the information collection or the collection procedures.

The Recipient shall submit any proposed sponsored information collection to the person identified on the DOE F 4600.1 (Award Face Page, Block 12). The proposal shall be submitted at least 120 days prior to the intended date of information collection. DOE will seek the requisite approval from the Office of Management and Budget (OMB) and will promptly notify the Recipient of the disposition of the request.

APPLICABLE TO COOPERATIVE AGREEMENTS

PAPERWORK REDUCTION - COOPERATIVE AGREEMENTS (SEPT 2002)

The award is subject to the requirements of the Paperwork Reduction Act of 1980 as implemented by the Office of Management and Budget rules, "Controlling Paperwork Burdens on the Public," published at 5 CFR 1320.

The Recipient shall submit any proposed sponsored information collection to the person identified on the DOE F 4600.1 (Award Face Page, Block 12). The proposal shall be submitted at least 120 days prior to the intended date of information collection. DOE will seek the requisite approval from the Office of Management and Budget (OMB) and will promptly notify the Recipient of the disposition of the request.

PUBLIC ACCESS TO INFORMATION (APR 2000)

The Freedom of Information Act, as amended, and the DOE implementing regulations (10 CFR 1004) require DOE to release certain documents and records regarding awards to any person who provides a written request. The intended use of the information will not be a criterion for release.

APPLICABLE TO ANY AWARD THAT MIGHT INVOLVE CLASSIFIED INFORMATION (NOT GENERALLY USED IN NETL AWARDS)

NATIONAL SECURITY (NOV 1998)

It is not expected that activities under the award will generate or otherwise involve classified information (i.e., Restricted Data, Formerly Restricted Data, National Security Information).

However, if in the opinion of the Recipient or DOE such involvement becomes expected prior to the closeout of the award, the Recipient or DOE shall notify the other in writing immediately. If the Recipient believes any information developed or acquired may be classifiable, the Recipient shall not provide the potentially classifiable information to anyone, including the DOE officials with whom the Recipient normally communicates, except the Director of Classification, and shall protect such information as if it were classified until notified by DOE that a determination has been made that it does not require such handling. Correspondence which includes the specific information in question shall be sent by registered mail to U. S. Department of Energy, Attn.: Executive Assistant for Defense Programs, DP-4, 4A-019/FORS, 1000 Independence Avenue, Washington, D.C. 20585. If the information is determined to be classified, the Recipient may wish to discontinue the project, in which case the Recipient and DOE shall terminate the award by mutual agreement. If the award is to be terminated, all materials deemed by DOE to be classified shall be forwarded to DOE, in a manner specified by DOE, for proper disposition. If the Recipient and DOE wish to continue the award, even though classified information is involved, the Recipient shall be required to

obtain both personnel and facility security clearances through the Office of Safeguards and Security for Headquarters awarded awards obtained through DOE field organizations. Costs associated with handling and protecting any such classified information shall be negotiated at the time the determination to proceed is made.

APPLICABLE IF THE AWARD IS TO BE FUNDED FROM THE INTERIOR AND RELATED AGENCIES APPROPRIATION ACT. PROGRAMS INCLUDE AGREEMENTS FOR NAVAL PETROLEUM AND OIL SHALE RESERVES, ELK HILLS SCHOOL LANDS FUNDS, STRATEGIC PETROLEUM RESERVE, CLEAN COAL TECHNOLOGY, ECONOMIC REGULATION, ENERGY INFORMATION ADMINISTRATION, ENERGY CONSERVATION, FOSSIL ENERGY RESEARCH AND DEVELOPMENT.

COMPLIANCE WITH BUY AMERICAN ACT (MAR 2004)

In accepting this award, the Recipient agrees to comply with sections 2 through 4 of the Act of March 3, 1933 (41 U.S.C. 10a-10c, popularly known as the "Buy American Act"). The Recipient should review the provisions of the Act to ensure that expenditures made under this award are in accordance with it.

NOTICE REGARDING THE PURCHASE OF AMERICAN-MADE EQUIPMENT AND PRODUCTS -- SENSE OF CONGRESS (MAR 2004)

It is the sense of the Congress that, to the greatest extent practicable, all equipment and products purchased with funds made available under this award should be American-made.

APPLICABLE IF THE AWARD IS TO BE FUNDED FROM THE INTERIOR AND RELATED AGENCIES APPROPRIATION ACT. PROGRAMS INCLUDE AGREEMENTS FOR NAVAL PETROLEUM AND OIL SHALE RESERVES, ELK HILLS SCHOOL LANDS FUNDS, STRATEGIC PETROLEUM RESERVE, CLEAN COAL TECHNOLOGY, ECONOMIC REGULATION, ENERGY INFORMATION ADMINISTRATION, ENERGY CONSERVATION, FOSSIL ENERGY RESEARCH AND DEVELOPMENT.

LOBBYING RESTRICTION (INTERIOR ACT FY 2004) (MAR 2004)

The awardee agrees that none of the funds obligated on this award shall be made available for any activity or the publication or distribution of literature that in any way tends to promote public support or opposition to any legislative proposal on which Congressional action is not complete. This restriction is in addition to those prescribed elsewhere in statute and regulation.

A copy of the DOE "Lobbying Brochure" which provides a summary of the statutory and regulatory restrictions regarding lobbying activities for Federal contractors can be found at

<http://professionals.pr.doe.gov/ma5/MA-5Web.nsf/Procurement/Lobbying+Brochure?OpenDocument>

APPLICABLE IF THE AWARD IS TO BE FUNDED FROM THE ENERGY AND WATER DEVELOPMENT APPROPRIATION ACT (SEE FAL 2003-02) THE FOLLOWING PROGRAMS ARE COVERED UNDER THE ENERGY AND WATER ACT: ENERGY SUPPLY, NON-DEFENSE ENVIRONMENTAL MANAGEMENT, URANIUM FACILITIES MAINTENANCE AND REMEDIATION SCIENCE, NUCLEAR WASTE DISPOSAL, DEPARTMENTAL ADMINISTRATION, OFFICE OF INSPECTOR GENERAL, POWER MARKETING ADMINISTRATIONS, FEDERAL ENERGY REGULATORY COMMISSION, NATIONAL NUCLEAR SECURITY ADMINISTRATION, DEFENSE ENVIRONMENTAL MANAGEMENT, DEFENSE NUCLEAR WASTE DISPOSAL, ENERGY SECURITY AND ASSURANCE, SECURITY, INTELLIGENCE, COUNTERINTELLIGENCE, INDEPENDENT OVERSIGHT AND PERFORMANCE ASSURANCE, ENVIRONMENTAL SAFETY AND HEALTH, WORKER AND COMMUNITY TRANSITION, AND HEARING AND APPEALS.

LOBBYING RESTRICTION (ENERGY AND WATER ACT FY 2004) (MAR 2004)

The awardee agrees that none of the funds obligated on this award shall be expended, directly or indirectly, to influence congressional action on any legislation or appropriation matters pending before Congress, other than to communicate to Members of Congress as described in 18 U.S.C. 1913. This restriction is in addition to those

prescribed elsewhere in statute and regulation.

A copy of the DOE "Lobbying Brochure" which provides a summary of the statutory and regulatory restrictions regarding lobbying activities for Federal contractors can be found at

<http://professionals.pr.doe.gov/ma5/MA-5Web.nsf/Procurement/Lobbying+Brochure?OpenDocument>

NOTICE REGARDING UNALLOWABLE COSTS AND LOBBYING ACTIVITIES (NOV 1998)

Recipients of financial assistance are cautioned to carefully review the allowable cost and other provisions applicable to expenditures under their particular award instruments. If financial assistance funds are spent for purposes or in amounts inconsistent with the allowable cost or any other provisions governing expenditures in an award instrument, the government may pursue a number of remedies against the Recipient, including in appropriate circumstances, recovery of such funds, termination of the award, suspension or debarment of the Recipient from future awards, and criminal prosecution for false statements.

Particular care should be taken by the Recipient to comply with the provisions prohibiting the expenditure of funds for lobbying and related activities. Financial assistance awards may be used to describe and promote the understanding of scientific and technical aspects of specific energy technologies, but not to encourage or support political activities such as the collection and dissemination of information related to potential, planned or pending legislation.

REPORTING (NOV 1998)

Failure to comply with the reporting requirements contained in this award will be considered a material noncompliance with the terms of the award. Noncompliance may result in a withholding of future payments, suspension or termination of the current award, and withholding of future awards. A willful failure to perform, a history of failure to perform, or of unsatisfactory performance of this and/or other financial assistance awards, may also result in a debarment action to preclude future awards by Federal agencies.

RECIPIENT PRESS RELEASES (APR 1998)

The DOE policy and procedure on planned press releases requires that all Recipient press releases be reviewed and approved by DOE prior to issuance. Therefore, the Recipient shall, at least ten (10) days prior to the planned issue date, submit a draft copy to the Contracting Officer of any planned press releases related to work performed under this award. The Contracting Officer will then obtain necessary reviews and clearances and provide the Recipient with the results of such reviews prior to the planned issue date.

PUBLICATION OF RESULTS/ACKNOWLEDGMENT STATEMENT (MAR 2004)

Publications, as well as reports prepared under this award shall contain the following acknowledgment statement:

"This (describe material) was prepared with the support of the U.S. Department of Energy, under Award No. DE-[]. However, any opinions, findings, conclusions, or recommendations expressed herein are those of the author(s) and do not necessarily reflect the views of the DOE".

APPLICABLE TO AWARDS INVOLVING GENETIC ENGINEERING RESEARCH INVOLVING RECOMBINANT DNA MOLECULES (NOV 1998)

Any Recipient performing research involving recombinant DNA molecules and/or organisms and viruses containing recombinant DNA molecules agrees by acceptance of this award to comply with the National Institute of Health "Guidelines for Research Involving Recombinant DNA Molecules," (59 FR 34496, July 5, 1994 as amended by 59 FR 40170, 60 FR 20726, 61 FR 1482, 61 FR 10004, 62 FR 53335, 62 FR 56196, 62 FR 59032 and 63 FR 8052, "subject to change - call 301-496-9838 to obtain reference to a current version.")

APPLICABLE IF A CATEGORICAL EXCLUSION FROM NEPA IS NOT SIGNED PRIOR TO THE

AWARD. DO NOT INCLUDE IT IN AWARDS IF A CATEGORICAL EXCLUSION (CX) HAS BEEN APPROVED OR EIA OR EIS HAS BEEN APPROVED BEFORE AWARD.

NATIONAL ENVIRONMENTAL POLICY ACT (NEPA) – PRIOR APPROVALS (JUNE 2001)

The National Environmental Policy Act of 1969 (NEPA) requires that all Federal agencies consider the impacts of their projects on the human environment. As part of the DOE's NEPA requirements, the Recipient shall be required to supply to the DOE certain environmental information. DOE funds may only be expended by the Recipient on [INSERT ACTIVITIES THAT CAN BE PERFORMED UNTIL THE NEPA DOCUMENT IS SIGNED, i.e., preliminary designs or drawings] activities, or in a manner consistent with 40 CFR 1506.1, until DOE notifies the Recipient that all NEPA requirements have been satisfied. In the event that the Recipient expends its own or third party funds on activities not authorized by this provision, such expenditures are entirely at the Recipient's risk that DOE's NEPA analysis will support such activities.

ENVIRONMENTAL, SAFETY & HEALTH (OCT 2003)

The recipient must comply with applicable Federal, State, and local environmental, safety and health laws and regulations for work performed under this award.

HAZARDOUS WASTES MANIFESTS AND LABELS (MAR 2003)

The Recipient shall not identify, on wastes manifests or container labels or otherwise, the DOE or the NETL as the owner or generator of hazardous wastes without written permission, signed by either the NETL Director or both the NETL Contracting Officer and the NETL ES&H Division Director, unless expressly and specifically permitted by the award.

PERMITS AND LICENSES (AUG 1999)

Within sixty (60) days of award, the Recipient shall submit to the DOE Project Officer a list of ES&H approvals that, in the Recipient's opinion, shall be required to complete the work under this award. The list shall include the topic of the approval being sought, the approving authority, and the expected submittal/approval schedule. The DOE Project Officer shall be notified as specific items are added or removed from the list and processed through their approval cycles.

The Recipient agrees to include this clause in first-tier subcontracts and agrees to enforce the terms of this clause.

PERFORMANCE OF WORK IN THE UNITED STATES (AUG 2003)

The Recipient agrees that at least 75% of the direct labor cost for the project (including subcontractor labor) will be incurred in the United States unless the Recipient can demonstrate to the satisfaction of the DOE that the United States economic interest will be better served through a greater percentage of work performed outside the United States.

SECTION III -INTELLECTUAL PROPERTY PROVISIONS

APPLICABLE TO R&D AWARDS TO FOR-PROFIT ORGANIZATIONS

INTELLECTUAL PROPERTY PROVISIONS (FOR-PROFIT R&D) (JAN 2004)

The patent and technical data clauses included in this section apply to this award. As used in these applicable clauses, the term "Patent Counsel" refers to the following point of contact:

Intellectual Property Law Division
U.S. Department of Energy
Chicago Operations Office
9800 South Cass Avenue
Argonne, IL 60439

In reading these provisions, any reference to "contractor" shall mean "recipient", and any reference to "contract" or "subcontract" shall mean "award" or "subaward".

The Recipient shall include intellectual property clauses in any subaward in accordance with requirements of the clauses in this section and of 10 CFR Parts 600.136 or 600.325 as appropriate.

APPLICABLE TO R&D AWARDS TO INSTITUTIONS OF HIGHER EDUCATION, HOSPITALS AND OTHER NONPROFIT ORGANIZATIONS

INTELLECTUAL PROPERTY PROVISIONS (NONPROFIT R&D) (JAN 2004)

Nonprofit organizations are subject to the intellectual property requirements at 10 CFR 600.136 and the clauses included in this section. As used in these applicable clauses, the term "Patent Counsel" refers to the following point of contact:

Intellectual Property Law Division
U.S. Department of Energy
Chicago Operations Office
9800 South Cass Avenue
Argonne, IL 60439

In reading these provisions, any reference to "contractor" shall mean "recipient", and any reference to "contract" or "subcontract" shall mean "award" or "subaward".

The Recipient shall include intellectual property clauses in any subaward in accordance with requirements of the clauses in this section and of 10 CFR Parts 600.136 or 600.325 as appropriate.

APPLICABLE TO NON R&D AWARDS

INTELLECTUAL PROPERTY PROVISIONS (NON R&D) (JAN 2004)

Nonprofit organizations are subject to the intellectual property requirements at 10 CFR 600.136 (a), (c) and (d). All other organizations are subject to the intellectual property requirements at 10 CFR 600.136 (a) and (c). As used in these regulations, the term "Patent Counsel" refers to the following point of contact:

Intellectual Property Law Division
U.S. Department of Energy
Chicago Operations Office
9800 South Cass Avenue
Argonne, IL 60439

The Recipient shall include intellectual property clauses in any subaward in accordance with requirements of the clauses in this section and of 10 CFR Parts 600.136 or 600.325 as appropriate.

CONFIDENTIAL BUSINESS INFORMATION (JAN 2004)

Information represented to the Department as being confidential business information, and which does not include “Technical Data” as that term is defined in the “Rights in Data” clause in this agreement, shall be submitted as an attachment to the required reports and will be withheld from disclosure outside the U.S. Government to the extent permitted by law. Such attachment and each page therein shall be stamped with the following legend and no other:

CONFIDENTIAL BUSINESS INFORMATION

The Recipient considers the material furnished herein to contain confidential business information which is to be withheld from disclosure outside the U.S. Government to the extent permitted by law.

APPLICABLE TO ALL R&D COOPERATIVE AGREEMENTS WITH FOR-PROFIT ORGANIZATIONS 52.227-1 AUTHORIZATION AND CONSENT (JUL 1995) - ALTERNATE I (APR 1984)

- (a) The Government authorizes and consents to all use and manufacture of any invention described in and covered by a United States patent in the performance of this contract or any subcontract at any tier.
- (b) The Contractor agrees to include, and require inclusion of, this clause, suitably modified to identify the parties, in all subcontracts at any tier for supplies or services (including construction, architect-engineer services, and materials, supplies, models, samples, and design or testing services expected to exceed the simplified acquisition threshold); however, omission of this clause from any subcontract, including those at or below the simplified acquisition threshold, does not affect this authorization and consent.

APPLICABLE TO ALL COOPERATIVE AGREEMENTS OVER \$100,000 WHICH INCLUDE AUTHORIZATION AND CONSENT ALT I 52.227-2 NOTICE AND ASSISTANCE REGARDING PATENT AND COPYRIGHT INFRINGEMENT (AUG 1996)

- (a) The Contractor shall report to the Contracting Officer, promptly and in reasonable written detail, each notice or claim of patent or copyright infringement based on the performance of this contract of which the Contractor has knowledge.
- (b) In the event of any claim or suit against the Government on account of any alleged patent or copyright infringement arising out of the performance of this contract or out of the use of any supplies furnished or work or services performed under this contract, the Contractor shall furnish to the Government, when requested by the Contracting Officer, all evidence and information in possession of the Contractor pertaining to such suit or claim. Such evidence and information shall be furnished at the expense of the Government except where the Contractor has agreed to indemnify the Government.
- (c) The Contractor agrees to include, and require inclusion of, this clause in all subcontracts at any tier for supplies or services (including construction and architect-engineer subcontracts and those for material, supplies, models, samples, or design or testing services) expected to exceed the simplified acquisition threshold at FAR 2.101.

POSSIBLY APPLICABLE IF THE RESEARCH INVOLVES PATENTED OR PROPRIETARY TECHNOLOGY OF A THIRD PARTY. 52.227-3 PATENT INDEMNITY (APR 1984)

- (a) The Contractor shall indemnify the Government and its officers, agents, and employees against liability, including costs, for infringement of any United States patent (except a patent issued upon an application that is now or may hereafter be withheld from issue pursuant to a Secrecy Order under 35 U.S.C. 181) arising out of the manufacture or delivery of supplies, the performance of services, or the construction, alteration, modification, or repair of real property (hereinafter referred to as “construction work”) under this contract, or out of the use or disposal by or for the account of the Government of such supplies or construction work.

- (b) This indemnity shall not apply unless the Contractor shall have been informed as soon as practicable by the Government of the suit or action alleging such infringement and shall have been given such opportunity as is afforded by applicable laws, rules, or regulations to participate in its defense. Further, this indemnity shall not apply to -
- (1) An infringement resulting from compliance with specific written instructions of the Contracting Officer directing a change in the supplies to be delivered or in the materials or equipment to be used, or directing a manner of performance of the contract not normally used by the Contractor;
 - (2) An infringement resulting from addition to or change in supplies or components furnished or construction work performed that was made subsequent to delivery or performance; or
 - (3) A claimed infringement that is unreasonably settled without the consent of the Contractor, unless required by final decree of a court of competent jurisdiction.

APPLICABLE IN AWARDS WHERE THE CONTRACTING OFFICER BELIEVES ROYALTIES WILL HAVE TO BE PAID BY THE AWARDEE OR SUBAWARDEE OR CONTRACTOR AT ANY TIER.

952.227-9 REFUND OF ROYALTIES (FEB 1995)

- (a) The contract price includes certain amounts for royalties payable by the Contractor or subcontractors or both, which amounts have been reported to the Contracting Officer.
- (b) The term "royalties" as used in this clause refers to any costs or charges in the nature of royalties, license fees, patent or license amortization costs, or the like, for the use of or for rights in patents and patent applications in connection with performing this contract or any subcontract here-under. The term also includes any costs or charges associated with the access to, use of, or other right pertaining to data that is represented to be proprietary and is related to the performance of this contract or the copying of such data or data that is copyrighted.
- (c) The Contractor shall furnish to the Contracting Officer, before final payment under this contract, a statement of royalties paid or required to be paid in connection with performing this contract and subcontracts hereunder together with the reasons.
- (d) The Contractor will be compensated for royalties reported under paragraph (c) of this clause, only to the extent that such royalties were included in the contract price and are determined by the Contracting Officer to be properly chargeable to the Government and allocable to the contract. To the extent that any royalties that are included in the contract price are not, in fact, paid by the Contractor or are determined by the Contracting Officer not to be properly chargeable to the government and allocable to the contract, the contract price shall be reduced. Repayment or credit to the Government shall be made as the Contracting Officer directs. The approval by DOE of any individual payments or royalties shall not prevent the Government from contesting at any time the enforceability, validity, scope of, or title to, any patent or the proprietary nature of data pursuant to which a royalty or other payment is to be or has been made.
- (e) If, at any time within 3 years after final payment under this contract, the Contractor for any reason is relieved in whole or in part from the payment of the royalties included in the final contract price as adjusted pursuant to paragraph (d) of this clause, the Contractor shall promptly notify the Contracting Officer of that fact and shall reimburse the Government in a corresponding amount.
- (f) The substance of this clause, including this paragraph (f), shall be included in any subcontract in which the amount of royalties reported during negotiation of the subcontract exceeds \$250.

APPLICABLE TO R&D AWARDS TO DOMESTIC SMALL BUSINESS FIRMS OR NONPROFIT ORGANIZATIONS, INCLUDING INSTITUTIONS OF HIGHER EDUCATION AND HOSPITALS
PATENT RIGHTS (SMALL BUSINESS FIRMS AND NONPROFIT ORGANIZATIONS) (OCT 2003)

- (a) Definitions

Invention means any invention or discovery which is or may be patentable or otherwise protectable under title 35 of the United States Code, or any novel variety of plant which is or may be protected under the Plant Variety Protection Act (7 U.S.C. 2321 et seq.). Made when used in relation to any invention means the conception or first actual reduction to practice of such invention.

Nonprofit organization means a university or other institution of higher education or an organization of the type described in section 501(c)(3) of the Internal Revenue Code of 1954 (26 U.S.C. 501(c)) and exempt from taxation under section 501(a) of the Internal Revenue Code (26 U.S.C. 501(a)) or any nonprofit scientific or educational organization qualified under a State nonprofit organization statute.

Practical application means to manufacture in the case of a composition or product, to practice in the case of a process or method, or to operate in the case of a machine or system; and, in each case, under such conditions as to establish that the invention is being utilized and that its benefits are to the extent permitted by law or Government regulations available to the public on reasonable terms.

Small business firm means a small business concern as defined at section 2 of Public Law 85-536 (16 U.S.C. 632) and implementing regulations of the Administrator of the Small Business Administration. For the purpose of this clause, the size standards for small business concerns involved in Government procurement and subcontracting at 13 CFR 121.3 through 121.8 and 13 CFR 121.3 through 121.12, respectively, will be used.

Subject invention means any invention of the Recipient conceived or first actually reduced to practice in the performance of work under this award, provided that in the case of a variety of plant, the date of determination (as defined in section 41(d) of the Plant Variety Protection Act, 7 U.S.C. 2401(d) must also occur during the period of award performance.

(b) Allocation of Principal Rights

The Recipient may retain the entire right, title, and interest throughout the world to each subject invention subject to the provisions of this Patent Rights clause and 35 U.S.C. 203. With respect to any subject invention in which the Recipient retains title, the Federal Government shall have a non-exclusive, nontransferable, irrevocable, paid-up license to practice or have practiced for or on behalf of the U.S. the subject invention throughout the world.

(c) Invention Disclosure, Election of Title and Filing of Patent Applications by Recipient

- (1) The Recipient will disclose each subject invention to DOE within two months after the inventor discloses it in writing to Recipient personnel responsible for the administration of patent matters. The disclosure to DOE shall be in the form of a written report and shall identify the award under which the invention was made and the inventor(s). It shall be sufficiently complete in technical detail to convey a clear understanding to the extent known at the time of disclosure, of the nature, purpose, operation, and the physical, chemical, biological or electrical characteristics of the invention. The disclosure shall also identify any publication, on sale or public use of the invention and whether a manuscript describing the invention has been submitted for publication and, if so, whether it has been accepted for publication at the time of disclosure. In addition, after disclosure to DOE, the Recipient will promptly notify DOE of the acceptance of any manuscript describing the invention for publication or of any on sale or public use planned by the Recipient.
- (2) The Recipient will elect in writing whether or not to retain title to any such invention by notifying DOE within two years of disclosure to DOE. However, in any case where publication, on sale, or public use has initiated the one-year statutory period wherein valid patent protection can still be obtained in the U.S., the period for election of title may be shortened by the agency to a date that is no more than 60 days prior to the end of the statutory period.
- (3) The Recipient will file its initial patent application on an invention to which it elects to retain title within one year after election of title or, if earlier, prior to the end of any statutory period wherein valid

patent protection can be obtained in the U.S. after a publication, on sale, or public use. The Recipient will file patent applications in additional countries or international patent offices within either ten months of the corresponding initial patent application, or six months from the date when permission is granted by the Commissioner of Patents and Trademarks to file foreign patent applications when such filing has been prohibited by a Secrecy Order.

- (4) Requests for extension of the time for disclosure to DOE, election, and filing under subparagraphs (c) (1), (2), and (3) of this clause may, at the discretion of DOE, be granted.

(d) Conditions When the Government May Obtain Title

The Recipient will convey to DOE, upon written request, title to any subject invention:

- (1) If the Recipient fails to disclose or elect the subject invention within the times specified in paragraph (c) of this patent rights clause, or elects not to retain title; provided that DOE may only request title within 60 days after learning of the failure of the Recipient to disclose or elect within the specified times;
- (2) In those countries in which the Recipient fails to file patent applications within the times specified in paragraph (c) of this Patent Rights clause; provided, however, that if the Recipient has filed a patent application in a country after the times specified in paragraph (c) of this Patent Rights clause, but prior to its receipt of the written request of DOE, the Recipient shall continue to retain title in that country; or
- (3) In any country in which the Recipient decides not to continue the prosecution of any application for, to pay the maintenance fees on, or defend in a reexamination or opposition proceeding on, a patent on a subject invention.

(e) Minimum Rights to Recipient and Protection of the Recipient Right To File

- (1) The Recipient will retain a non-exclusive royalty-free license throughout the world in each subject invention to which the Government obtains title, except if the Recipient fails to disclose the subject invention within the times specified in paragraph (c) of this Patent Rights clause. The Recipient's license extends to its domestic subsidiaries and affiliates, if any, within the corporate structure of which the Recipient is a party and includes the right to grant sublicenses of the same scope of the extent the Recipient was legally obligated to do so at the time the award was awarded. The license is transferable only with the approval of DOE except when transferred to the successor of that part of the Recipient's business to which the invention pertains.
- (2) The Recipient's domestic license may be revoked or modified by DOE to the extent necessary to achieve expeditious practical application of the subject invention pursuant to an application for an exclusive license submitted in accordance with applicable provisions at 37 CFR part 404 and the agency's licensing regulation, if any. This license will not be revoked in that field of use or the geographical areas in which the Recipient has achieved practical application and continues to make the benefits of the invention reasonably accessible to the public. The license in any foreign country may be revoked or modified at discretion of the funding Federal agency to the extent the Recipient, its licensees, or its domestic subsidiaries or affiliates have failed to achieve practical application in that foreign country.
- (3) Before revocation or modification of the license, the funding Federal agency will furnish the Recipient a written notice of its intention to revoke or modify the license, and the Recipient will be allowed thirty days (or such other time as may be authorized by DOE for good cause shown by the Recipient) after the notice to show cause why the license should not be revoked or modified. The Recipient has the right to appeal, in accordance with applicable regulations in 37 CFR Part 404 and the agency's licensing regulations, if any, concerning the licensing of Government-owned inventions, any decision concerning the revocation or modification of its license.

(f) Recipient Action To Protect Government's Interest

- (1) The Recipient agrees to execute or to have executed and promptly deliver to DOE all instruments necessary to:
 - (i) Establish or confirm the rights the Government has throughout the world in those subject inventions for which the Recipient retains title; and
 - (ii) Convey title to DOE when requested under paragraph (d) of this Patent Rights clause, and to enable the government to obtain patent protection throughout the world in that subject invention.
- (2) The Recipient agrees to require, by written agreement, its employees, other than clerical and non-technical employees, to disclose promptly in writing to personnel identified as responsible for the administration of patent matters and in a format suggested by the Recipient each subject invention made under this award in order that the Recipient can comply with the disclosure provisions of paragraph (c) of this Patent Rights clause, and to execute all papers necessary to file patent applications on subject inventions and to establish the Government's rights in the subject inventions. The disclosure format should require, as a minimum, the information requested by paragraph (c)(1) of this Patent Rights clause. The Recipient shall instruct such employees through the employee agreements or other suitable educational programs on the importance of reporting inventions in sufficient time to permit the filing of patent applications prior to U.S. or foreign statutory bars.
- (3) The Recipient will notify DOE of any decision not to continue prosecution of a patent application, pay maintenance fees, or defend in a reexamination or opposition proceeding on a patent, in any country, not less than 30 days before the expiration of the response period required by the relevant patent office.
- (4) The Recipient agrees to include, within the specification of any U.S. patent application and any patent issuing thereon covering a subject invention, the following statement: "This invention was made with Government support under (identify the award) awarded by (identify DOE). The Government has certain rights in this invention."

(g) Subaward/Contract

- (1) The Recipient will include this Patent Rights clause, suitably modified to identify the parties, in all subawards/contracts, regardless of tier, for experimental, developmental or research work to be performed by a small business firm or nonprofit organization. The subrecipient/contractor will retain all rights provided for the Recipient in this Patent Rights clause, and the Recipient will not, as part of the consideration for awarding the subcontract, obtain rights in the subcontractors' subject inventions.
- (2) The Recipient will include in all other subawards/contracts, regardless of tier, for experimental, developmental or research work, the patent rights clause required by 10 CFR 600.325(c).
- (3) In the case of subawards/contracts at any tier, DOE, the Recipient, and the subrecipient/contractor agree that the mutual obligations of the parties created by this clause constitute a contract between the subrecipient/contractor and DOE with respect to those matters covered by the clause.

(h) Reporting on Utilization of Subject Inventions

The Recipient agrees to submit on request periodic reports no more frequently than annually on the utilization of a subject invention or on efforts at obtaining such utilization that are being made by the Recipient or its licensees or assignees. Such reports shall include information regarding the status of development, date of first commercial sale or use, gross royalties received by the Recipient and such other data and information as DOE may reasonably specify. The Recipient also agrees to provide additional reports in connection with any march-in proceeding undertaken by DOE in accordance with paragraph (j) of this Patent Rights clause. As required by

35 U.S.C. 202(c)(5), DOE agrees it will not disclose such information to persons outside the Government without the permission of the Recipient.

(i) Preference for United States Industry.

Notwithstanding any other provision of this Patent Rights clause, the Recipient agrees that neither it nor any assignee will grant to any person the exclusive right to use or sell any subject invention in the U.S. unless such person agrees that any products embodying the subject invention or produced through the use of the subject invention will be manufactured substantially in the U.S. However, in individual cases, the requirement for such an agreement may be waived by DOE upon a showing by the Recipient or its assignee that reasonable but unsuccessful efforts have been made to grant licenses on similar terms to potential licensees that would be likely to manufacture substantially in the U.S. or that under the circumstances domestic manufacture is not commercially feasible.

(j) March-in-Rights

The Recipient agrees that with respect to any subject invention in which it has acquired title, DOE has the right in accordance with procedures at 37 CFR 401.6 and any supplemental regulations of the Agency to require the Recipient, an assignee or exclusive licensee of a subject invention to grant a non-exclusive, partially exclusive, or exclusive license in any field of use to a responsible applicant or applicants, upon terms that are reasonable under the circumstances and if the Recipient, assignee, or exclusive licensee refuses such a request, DOE has the right to grant such a license itself if DOE determines that:

- (1) Such action is necessary because the Recipient or assignee has not taken or is not expected to take within a reasonable time, effective steps to achieve practical application of the subject invention in such field of use;
- (2) Such action is necessary to alleviate health or safety needs which are not reasonably satisfied by the Recipient, assignee, or their licensees;
- (3) Such action is necessary to meet requirements for public use specified by Federal regulations and such requirements are not reasonably satisfied by the Recipient, assignee, or licensee; or
- (4) Such action is necessary because the agreement required by paragraph (i) of this Patent Rights clause has not been obtained or waived or because a licensee of the exclusive right to use or sell any subject invention in the U.S. is in breach of such agreement.

(k) Special Provisions for Awards With Nonprofit Organizations

If the Recipient is a nonprofit organization, it agrees that:

Rights to a subject invention in the U.S. may not be assigned without the approval of DOE, except where such assignment is made to an organization which has as one of its primary functions the management of inventions, provided that such assignee will be subject to the same provisions as the Recipient;

- (1) The Recipient will share royalties collected on a subject invention with the inventor, including Federal employee co-inventors (when DOE deems it appropriate) when the subject invention is assigned in accordance with 35 U.S.C. 202(e) and 37 CFR 401.10;
- (2) The balance of any royalties or income earned by the Recipient with respect to subject inventions, after payment of expenses (including payments to inventors) incidental to the administration of subject inventions, will be utilized for the support of scientific or engineering research or education; and
- (3) It will make efforts that are reasonable under the circumstances to attract licensees of subject inventions that are small business firms and that it will give preference to a small business firm if the Recipient determines that the small business firm has a plan or proposal for marketing the invention

which, if executed, is equally likely to bring the invention to practical application as any plans or proposals from applicants that are not small business firms; provided that the Recipient is also satisfied that the small business firm has the capability and resources to carry out its plan or proposal. The decision whether to give a preference in any specific case will be at the discretion of the Recipient. However, the Recipient agrees that the Secretary of Commerce may review the Recipient's licensing program and decisions regarding small business applicants, and the Recipient will negotiate changes to its licensing policies, procedures or practices with the Secretary when the Secretary's review discloses that the Recipient could take reasonable steps to implement more effectively the requirements of this paragraph (k)(4).

(4) Communications

All communications required by this Patent Rights clause should be sent to the DOE Patent Counsel address listed in the Award Document.

(l) Electronic Filing

Unless otherwise Specified in the award, the information identified in paragraphs (f)(2) and (f)(3) may be electronically filed.

APPLICABLE TO LARGE BUSINESS FIRMS, STATE OR LOCAL GOVERNMENTS, AND FOREIGN ENTITIES

PATENT RIGHTS (LARGE BUSINESS FIRMS) -- NO WAIVER (OCT 2003)

(a) Definitions

DOE patent waiver regulations, as used in this clause, means the Department of Energy patent waiver regulations in effect on the date of award. See 10 CFR Part 784.

Invention, as used in this clause, means any invention or discovery which is or may be patentable or otherwise protectable under title 35 of the United States Code or any novel variety of plant that is or may be protectable under the Plant Variety Protection Act (7 U.S.C. 2321, et seq.).

Patent Counsel, as used in this clause, means the Department of Energy Patent Counsel assisting the awarding activity.

Subject invention, as used in this clause, means any invention of the Recipient conceived or first actually reduced to practice in the course of or under this agreement.

(b) Allocations of Principal Rights

- (1) Assignment to the Government. The Recipient agrees to assign to the Government the entire right, title, and interest throughout the world in and to each subject invention, except to the extent that rights are retained by the Recipient under subparagraph (b)(2) and paragraph (d) of this clause.
- (2) Greater rights determinations. The Recipient, or an employee-inventor after consultation with the Recipient, may request greater rights than the nonexclusive license an the foreign patent rights provided in paragraph (d) of this clause on identified inventions in accordance with the DOE patent waiver regulation. Each determination of greater rights under this agreement shall be subject to paragraph (c) of this clause, unless otherwise provided in the greater rights determination, and to the reservations and conditions deemed to be appropriate by the Secretary of Energy or designee.

(c) Minimum Rights Acquired by the Government

With respect to each subject invention to which the Department of Energy grants the Recipient principal or exclusive rights, the Recipient agrees to grant to the Government: A nonexclusive, nontransferable, irrevocable,

paid-up license to practice or have practiced each subject invention throughout the world by or on behalf of the Government of the United States (including any Government agency); "march-in rights" as set forth in 37 CFR 401.14(a)(J); preference for U.S. industry as set forth in 37 CFR 401.14(a)(I); periodic reports upon request, no more frequently than annually, on the utilization or intent of utilization of a subject invention in a manner consistent with 35 U.S.C. 202(c)(5); and such Government rights in any instrument transferring rights in a subject invention.

(d) Minimum Rights to the Recipient

- (1) The Recipient is hereby granted a revocable, nonexclusive, royalty-free license in each patent application filed in any country on a subject invention and any resulting patent in which the Government obtains title, unless the Recipient fails to disclose the subject invention within the times specified in subparagraph (e)(2) of this clause. The Recipient's license extends to its domestic subsidiaries and affiliates, if any, within the corporate structure of which the Recipient is a part and includes the right to grant sublicenses of the same scope to the extent the Recipient was legally obligated to do so at the time the agreement was awarded. The license is transferable only with the approval of DOE except when transferred to the successor of that part of the Recipient's business to which the invention pertains.
- (2) The Recipient may request the right to acquire patent rights to a subject invention in any foreign country where the Government has elected not to secure such rights, subject to the minimum rights acquired by the Government similar to paragraph (c) of this clause. Such request must be made in writing to the Patent Counsel as part of the disclosure required by subparagraph (e)(2) of this clause, with a copy to the DOE Contracting Officer. DOE approval, if given, will be based on a determination that this would best serve the national interest.

(e) Invention Identification, Disclosures, and Reports

- (1) The Recipient shall establish and maintain active and effective procedures to assure that subject inventions are promptly identified and disclosed to Recipient personnel responsible for patent matters within 6 months of conception and/or first actual reduction to practice, whichever occurs first in the performance of work under this agreement. These procedures shall include the maintenance of laboratory notebooks or equivalent records and other records as are reasonably necessary to document the conception and/or the first actual reduction to practice of subject inventions, and records that show that the procedures for identifying and disclosing the inventions are followed. Upon request, the Recipient shall furnish the Contracting Officer a description of such procedures for evaluation and for determination as to their effectiveness.
- (2) The Recipient shall disclose each subject invention to the DOE Patent Counsel with a copy to the Contracting Officer within 2 months after the inventor discloses it in writing to Recipient personnel responsible for patent matters or, if earlier, within 6 months after the Recipient becomes aware that a subject invention has been made, but in any event before any on sale, public use, or publication of such invention known to the Recipient. The disclosure to DOE shall be in the form of a written report and shall identify the agreement under which the invention was made and the inventor(s). It shall be sufficiently complete in technical detail to convey a clear understanding, to the extent known at the time of the disclosure, of the nature, purpose, operation, and physical, chemical, biological, or electrical characteristics of the invention. The disclosure shall also identify any publication, on sale, or public use of the invention and whether a manuscript describing the invention has been submitted for publication and, if so, whether it has been accepted for publication at the time of disclosure. In addition, after disclosure to DOE, the Recipient shall promptly notify Patent Counsel of the acceptance of any manuscript describing the invention for publication or of any on sale or public use planned by the Recipient. The report should also include any request for a greater rights determination in accordance with subparagraph (b)(2) of this clause. When an invention is disclosed to DOE under this paragraph, it shall be deemed to have been made in the manner specified in Sections (a)(1) and (a)(2) of 42 U.S.C. 5908, unless the Recipient contends in writing at the time the invention is disclosed that it was not so made.

- (3) The Recipient shall furnish the Contracting Officer a final report, within 3 months after completion of the work listing all subject inventions or containing a statement that there were no such inventions, and listing all subawards/contracts at any tier containing a patent rights clause or containing a statement that there were no such subawards/contracts.
- (4) The Recipient agrees to require, by written agreement, its employees, other than clerical and nontechnical employees, to disclose promptly in writing to personnel identified as responsible for the administration of patent matters and in a format suggested by the Recipient each subject invention made under subaward/contract in order that the Recipient can comply with the disclosure provisions of paragraph (c) of this clause, and to execute all papers necessary to file patent applications on subject inventions and to establish the Government's rights in the subject inventions. This disclosure format should require, as a minimum, the information required by subparagraph (e)(2) of this clause.
- (5) The Recipient agrees, subject to FAR 27.302(j), that the Government may duplicate and disclose subject invention disclosures and all other reports and papers furnished or required to be furnished pursuant to this clause.

(f) Examination of Records Relating to Inventions

- (1) The Contracting Officer or any authorized representative shall, until 3 years after final payment under this agreement, have the right to examine any books (including laboratory notebooks), records, and documents of the Recipient relating to the conception or first actual reduction to practice of inventions in the same field of technology as the work under this agreement to determine whether –
 - (i) Any such inventions are subject inventions;
 - (ii) The Recipient has established and maintains the procedures required by subparagraphs (e)(1) and (4) of this clause;
 - (iii) The Recipient and its inventors have complied with the procedures.
- (2) If the Contracting Officer learns of an unreported Recipient invention which the Contracting Officer believes may be a subject invention, the Recipient may be required to disclose the invention to DOE for a determination of ownership rights.
- (3) Any examination of records under this paragraph will be subject to appropriate conditions to protect the confidentiality of the information involved.

(g) Subaward/Contract

- (1) The recipient shall include the clause PATENT RIGHTS (SMALL BUSINESS FIRMS AND NONPROFIT ORGANIZATIONS) (suitably modified to identify the parties) in all subawards/contracts, regardless of tier, for experimental, developmental, demonstration, or research work to be performed by a small business firm or domestic nonprofit organization, except where the work of the subaward/contract is subject to an Exceptional Circumstances Determination by DOE. In all other subawards/contracts, regardless of tier, for experimental, developmental, demonstration, or research work, the Recipient shall include this clause (suitably modified to identify the parties), or an alternate clause as directed by the contracting officer. The Recipient shall not, as part of the consideration for awarding the subaward/contract, obtain rights in the subrecipient's/contractor's subject inventions.
- (2) In the event of a refusal by a prospective subrecipient/contractor to accept such a clause the Recipient:
 - (i) Shall promptly submit a written notice to the Contracting Officer setting forth the subrecipient/contractor's reasons for such refusal and other pertinent information that may expedite disposition of the matter; and

- (ii) Shall not proceed with such subaward/contract without the written authorization of the Contracting Officer.
- (3) In the case of subawards/contracts at any tier, DOE, the subrecipient/contractor, and Recipient agree that the mutual obligations of the parties created by this clause constitute a contract between the subrecipient/contractor and DOE with respect to those matters covered by this clause.
- (4) The Recipient shall promptly notify the Contracting Officer in writing upon the award of any subaward/contract at any tier containing a patent rights clause by identifying the subrecipient/contractor, the applicable patent rights clause, the work to be performed under the subaward/contract, and the dates of award and estimated completion. Upon request of the Contracting Officer, the Recipient shall furnish a copy of such subaward/contract, and, no more frequently than annually, a listing of the subawards/contracts that have been awarded.
- (5) The Recipient shall identify all subject inventions of a subrecipient/contractor of which it acquires knowledge in the performance of this agreement and shall notify the Patent Counsel, with a copy to the contracting officer, promptly upon identification of the inventions.

(h) Atomic Energy

- (1) No claim for pecuniary award of compensation under the provisions of the Atomic Energy Act of 1954, as amended, shall be asserted with respect to any invention or discovery made or conceived in the course of or under this agreement.
- (2) Except as otherwise authorized in writing by the Contracting Officer, the Recipient will obtain patent agreements to effectuate the provisions of subparagraph (h)(1) of this clause from all persons who perform any part of the work under this agreement, except nontechnical personnel, such as clerical employees and manual laborers.

(i) Publication

It is recognized that during the course of the work under this agreement, the Recipient or its employees may from time to time desire to release or publish information regarding scientific or technical developments conceived or first actually reduced to practice in the course of or under this agreement. In order that public disclosure of such information will not adversely affect the patent interests of DOE or the Recipient, patent approval for release of publication shall be secured from Patent Counsel prior to any such release or publication.

(j) Forfeiture of Rights in Unreported Subject Inventions

- (1) The Recipient shall forfeit and assign to the Government, at the request of the Secretary of Energy or designee, all rights in any subject invention which the Recipient fails to report to Patent Counsel within six months after the time the Recipient:
 - (i) Files or causes to be filed a United States or foreign patent application thereon; or
 - (ii) Submits the final report required by subparagraph (e)(3) of this clause, whichever is later.
- (2) However, the Recipient shall not forfeit rights in a subject invention if, within the time specified in subparagraph (e)(2) of this clause, the Recipient:
 - (i) Prepares a written decision based upon a review of the record that the invention was neither conceived nor first actually reduced to practice in the course of or under the agreement and delivers the decision to Patent Counsel, with a copy to the Contracting Officer, or
 - (ii) Contending that the invention is not a subject invention, the Recipient nevertheless

discloses the invention and all facts pertinent to this contention to the Patent Counsel, with a copy of the Contracting Officer; or

(iii) Establishes that the failure to disclose did not result from the Recipient's fault or negligence.

(3) Pending written assignment of the patent application and patents on a subject invention determined by the Secretary of Energy or designee to be forfeited (such determination to be a final decision under the Disputes clause of this agreement), the Recipient shall be deemed to hold the invention and the patent applications and patents pertaining thereto in trust for the Government. The forfeiture provision of this paragraph (j) shall be in addition to and shall not supersede other rights and remedies which the Government may have with respect to subject inventions.

**APPLICABLE TO FOR-PROFIT ENTITIES WHERE SPECIAL PROTECTED DATA STATUTES DO NOT APPLY (e.g. EPACT)
RIGHTS IN DATA - GENERAL (OCT 2003)**

(a) Definitions

Computer Data Bases, as used in this clause, means a collection of data in a form capable of, and for the purpose of, being stored in, processed, and operated on by a computer. The term does not include computer software.

Computer software, as used in this clause, means (i) computer programs which are data comprising a series of instructions, rules, routines or statements, regardless of the media in which recorded, that allow or cause a computer to perform a specific operation or series of operations and (ii) data comprising source code listings, design details, algorithms, processes, flow charts, formulae, and related material that would enable the computer program to be produced, created or compiled. The term does not include computer data bases.

Data, as used in this clause, means recorded information, regardless of form or the media on which it may be recorded. The term includes technical data and computer software. The term does not include information incidental to administration, such as financial, administrative, cost or pricing, or management information.

Form, fit, and function data, as used in this clause, means data relating to items, components, or processes that are sufficient to enable physical and functional interchangeability, as well as data identifying source, size, configuration, mating, and attachment characteristics, functional characteristics, and performance requirements; except that for computer software it means data identifying source, functional characteristics, and performance requirements but specifically excludes the source code, algorithm, process, formulae, and flow charts of the software.

Limited rights, as used in this clause, means the rights of the Government in limited rights data as set forth in the Limited Rights Notice of subparagraph (g)(2) if included in this clause.

Limited rights data, as used in this clause, means data (other than computer software) developed at private expense that embody trade secrets or are commercial or financial and confidential or privileged.

Restricted computer software, as used in this clause, means computer software developed at private expense and that is a trade secret; is commercial or financial and is confidential or privileged; or is published copyrighted computer software; including minor modifications of such computer software.

Restricted rights, as used in this clause, means the rights of the Government in restricted computer software, as set forth in a Restricted Rights Notice of subparagraph (g)(3) if included in this clause, or as otherwise may be provided in a collateral agreement incorporated in and made part of this contract, including minor modifications of such computer software.

Technical data, as used in this clause, means data (other than computer software) which are of a scientific or

technical nature. Technical data does not include computer software, but does include manuals and instructional materials and technical data formatted as a computer data base.

Unlimited rights, as used in this clause, means the right of the Government to use, disclose, reproduce, prepare derivative works, distribute copies to the public, and perform publicly and display publicly, in any manner and for any purpose, and to have or permit others to do so.

(b) Allocations of Rights

(1) Except as provided in paragraph (c) of this clause regarding copyright, the Government shall have unlimited rights in –

- (i) Data first produced in the performance of this agreement;
- (ii) Form, fit, and function data delivered under this agreement;
- (iii) Data delivered under this agreement (except for restricted computer software) that constitute manuals or instructional and training material for installation, operation, or routine maintenance and repair of items, components, or processes delivered or furnished for use under this agreement; and
- (iv) All other data delivered under this agreement unless provided otherwise for limited rights data or restricted computer software in accordance with paragraph (g) of this clause.

(2) The Recipient shall have the right to –

- (i) Use, release to others, reproduce, distribute, or publish any data first produced or specifically used by the Recipient in the performance of this agreement, unless provided otherwise in paragraph (d) of this clause;
- (ii) Protect from unauthorized disclosure and use those data which are limited rights data or restricted computer software to the extent provided in paragraph (g) of this clause;
- (iii) Substantiate use of, add or correct limited rights, restricted rights, or copyright notices and to take over appropriate action, in accordance with paragraphs (e) and (f) of this clause; and
- (iv) Establish claim to copyright subsisting in data first produced in the performance of this agreement to the extent provided in subparagraph (c)(1) of this clause.

(c) Copyright

- (1) Data first produced in the performance of this agreement. Unless provided otherwise in paragraph (d) of this clause, the Recipient may establish, without prior approval of the Contracting Officer, claim to copyright subsisting in data first produced in the performance of this agreement. When claim to copyright is made, the Recipient shall affix the applicable copyright notices of 17 U.S.C. 401 or 402 and acknowledgement of Government sponsorship (including agreement number) to the data when such data are delivered to the Government, as well as when the data are published or deposited for registration as a published work in the U.S. Copyright Office. For such copyrighted data, including computer software, the Recipient grants to the Government, and others acting on its behalf, a paid-up nonexclusive, irrevocable worldwide license in such copyrighted data to reproduce, prepare derivative works, distribute copies to the public, and perform publicly and display publicly, by or on behalf of the Government.
- (2) Data not first produced in the performance of this agreement. The Recipient shall not, without prior written permission of the Contracting Officer, incorporate in data delivered under this agreement any data not first produced in the performance of this agreement and which contains the copyright notice of 17 U.S.C. 401 or 402, unless the Recipient identifies such data and grants to the Government, or acquires on its behalf, a license of the same scope as set forth in subparagraph (c)(1) of this clause;

provided, however, that if such data are computer software the Government shall acquire a copyright license as set forth in subparagraph (g)(3) of this clause if included in this agreement or as otherwise may be provided in a collateral agreement incorporated in or made part of this agreement.

- (3) Removal of copyright notices. The Government agrees not to remove any copyright notices placed on data pursuant to this paragraph (c), and to include such notices on all reproductions of the data.

(d) Release, Publication and Use of Data

- (1) The Recipient shall have the right to use, release to others, reproduce, distribute, or publish any data first produced or specifically used by the Recipient in the performance of this agreement, except to the extent such data may be subject to the Federal export control or national security laws or regulations, or unless otherwise provided in this paragraph of this clause or expressly set forth in this agreement.
- (2) The Recipient agrees that to the extent it receives or is given access to data necessary for the performance of this award, which contain restrictive markings, the Recipient shall treat the data in accordance with such markings unless otherwise specifically authorized in writing by the contracting officer.

(e) Unauthorized Marking of Data

- (1) Notwithstanding any other provisions of this agreement concerning inspection or acceptance, if any data delivered under this agreement are marked with the notices specified in subparagraph (g)(2) or (g)(3) of this clause and use of such is not authorized by this clause, or if such data bears any other restrictive or limiting markings not authorized by this agreement, the Contracting Officer may at any time either return the data to the Recipient or cancel or ignore the markings. However, the following procedures shall apply prior to canceling or ignoring the markings.
 - (i) The Contracting Officer shall make written inquiry to the Recipient affording the Recipient 30 days from receipt of the inquiry to provide written justification to substantiate the propriety of the markings;
 - (ii) If the Recipient fails to respond or fails to provide written justification to substantiate the propriety of the markings within the 30-day period (or a longer time not exceeding 90 days approved in writing by the Contracting Officer for good cause shown), the Government shall have the right to cancel or ignore the markings at any time after said period and the data will no longer be made subject to any disclosure prohibitions.
 - (iii) If the Recipient provides written justification to substantiate the propriety of the markings within the period set in subparagraph (e)(1)(i) of this clause, the Contracting Officer shall consider such written justification and determine whether or not the markings are to be cancelled or ignored. If the Contracting Officer determines that the markings are authorized, the Recipient shall be so notified in writing. If the Contracting Officer determines, with concurrence of the head of the contracting activity, that the markings are not authorized, the Contracting Officer shall furnish the Recipient a written determination, which determination shall become the final agency decision regarding the appropriateness of the markings unless the Recipient files suit in a court of competent jurisdiction within 90 days of receipt of the Contracting Officer's decision. The Government shall continue to abide by the markings under this subparagraph (e)(1)(iii) until final resolution of the matter either by the Contracting Officer's determination becoming final (in which instance the Government shall thereafter have the right to cancel or ignore the markings at any time and the data will no longer be made subject to any disclosure prohibitions), or by final disposition of the matter by court decision if suit is filed.
- (2) The time limits in the procedures set forth in subparagraph (e)(1) of this clause may be modified in

accordance with agency regulations implementing the Freedom of Information Act (5 U.S.C. 552) if necessary to respond to a request thereunder.

(f) Omitted or Incorrect Markings

(1) Data delivered to the Government without either the limited rights or restricted rights notice as authorized by paragraph (g) of this clause, or the copyright notice required by paragraph (c) of this clause, shall be deemed to have been furnished with unlimited rights, and the Government assumes no liability for the disclosure, use, or reproduction of such data. However, to the extent the data has not been disclosed without restriction outside the Government, the Recipient may request, within 6 months (or a longer time approved by the Contracting Officer for good cause shown) after delivery of such data, permission to have notices placed on qualifying data at the Recipient's expense, and the Contracting Officer may agree to do so if the Recipient:

- (i) Identifies the data to which the omitted notice is to be applied;
- (ii) Demonstrates that the omission of the notice was inadvertent;
- (iii) Establishes that the use of the proposed notice is authorized; and
- (iv) Acknowledges that the Government has no liability with respect to the disclosure, use, or reproduction of any such data made prior to the addition of the notice or resulting from the omission of the notice.

(2) The Contracting Officer may also:

- (i) Permit correction at the Recipient's expense of incorrect notices if the Recipient identifies the data on which correction of the notice is to be made, and demonstrates that the correct notice is authorized, or
- (ii) Correct any incorrect notices.

(g) Protection of Limited Rights Data and Restricted Computer Software

When data other than that listed in subparagraphs (b)(1)(i), (ii), and (iii) of this clause are specified to be delivered under this agreement and qualify as either limited rights data or restricted computer software, if the Recipient desires to continue protection of such data, the Recipient shall withhold such data and not furnish them to the Government under this agreement. As a condition to this withholding, the Recipient shall identify the data being withheld and furnish form, fit, and function data in lieu thereof. Limited rights data that are formatted as a computer data base for delivery to the Government are to be treated as limited rights data and not restricted computer software.

(h) Subaward/Contract

The Recipient has the responsibility to obtain from its subrecipients/contractors all data and rights therein necessary to fulfill the Recipient's obligations to the Government under this agreement. If a subrecipient/contractor refuses to accept terms affording the Government such rights, the Recipient shall promptly bring such refusal to the attention of the Contracting Officer and not proceed with the subaward/contract award without further authorization.

(i) Additional Data Requirements

In addition to the data specified elsewhere in this agreement to be delivered, the Contracting Officer may, at anytime during agreement performance or within a period of 3 years after acceptance of all items to be delivered under this agreement, order any data first produced or specifically used in the performance of this agreement. This clause is applicable to all data ordered under this subparagraph. Nothing contained in this

subparagraph shall require the Recipient to deliver any data the withholding of which is authorized by this clause, or data which are specifically identified in this agreement as not subject to this clause. When data are to be delivered under this subparagraph, the Recipient will be compensated for converting the data into the prescribed form, for reproduction, and for delivery.

- (j) The recipient agrees, except as may be otherwise specified in this award for specific data items listed as not subject to this paragraph, that the Contracting Officer or an authorized representative may, up to three years after acceptance of all items to be delivered under this award, inspect at the Recipient's facility any data withheld pursuant to paragraph (g) of this clause, for purposes of verifying the Recipient's assertion pertaining to the limited rights or restricted rights status of the data or for evaluating work performance. Where the Recipient whose data are to be inspected demonstrates to the Contracting Officer that there would be a possible conflict of interest if the inspection were made by a particular representative, the Contracting Officer shall designate an alternate inspector.

APPLICABLE TO FOR-PROFIT ENTITIES WHERE SPECIAL PROTECTED DATA STATUTES APPLY (e.g. EPACT)
RIGHTS IN DATA -- PROGRAMS COVERED UNDER SPECIAL DATA STATUTES (OCT 2003)

(a) Definitions

Computer Data Bases, as used in this clause, means a collection of data in a form capable of, and for the purpose of, being stored in, processed, and operated on by a computer. The term does not include computer software.

Computer software, as used in this clause, means (i) computer programs which are data comprising a series of instructions, rules, routines, or statements, regardless of the media in which recorded, that allow or cause a computer to perform a specific operation or series of operations and (ii) data comprising source code listings, design details, algorithms, processes, flow charts, formulae and related material that would enable the computer program to be produced, created or compiled. The term does not include computer data bases.

Data, as used in this clause, means recorded information, regardless of form or the media on which it may be recorded. The term includes technical data and computer software. The term does not include information incidental to administration, such as financial, administrative, cost or pricing or management information.

Form, fit, and function data, as used in this clause, means data relating to items, components, or processes that are sufficient to enable physical and functional interchangeability as well as data identifying source, size, configuration, mating and attachment characteristics, functional characteristics, and performance requirements except that for computer software it means data identifying source, functional characteristics, and performance requirements but specifically excludes the source code, algorithm, process, formulae, and flow charts of the software.

Limited rights data, as used in this clause, means data (other than computer software) developed at private expense that embody trade secrets or are commercial or financial and confidential or privileged.

Restricted computer software, as used in this clause, means computer software developed at private expense and that is a trade secret; is commercial or financial and confidential or privileged; or is published copyrighted computer software; including modifications of such computer software.

Protected data, as used in this clause, means technical data or commercial or financial data first produced in the performance of the award which, if it had been obtained from and first produced by a non-federal party, would be a trade secret or commercial or financial information that is privileged or confidential under the meaning of 5 U.S.C. 552(b)(4) and which data is marked as being protected data by a party to the award.

Protected rights, as used in this clause, mean the rights in protected data set forth in the Protected Rights Notice of paragraph (g) of this clause.

Technical data, as used in this clause, means that data which are of a scientific or technical nature. Technical data does not include computer software, but does include manuals and instructional materials and technical data formatted as a computer data base.

Unlimited rights, as used in this clause, means the right of the Government to use, disclose, reproduce, prepare derivative works, distribute copies to the public, and perform publicly and display publicly, in any manner and for any purpose whatsoever, and to have or permit others to do so.

(b) Allocation of Rights

(1) Except as provided in paragraph (c) of this clause regarding copyright, the Government shall have unlimited rights in –

- (i) Data specifically identified in this agreement as data to be delivered without restriction;
- (ii) Form, fit, and function data delivered under this agreement;
- (iii) Data delivered under this agreement (except for restricted computer software) that constitute manuals or instructional and training material for installation, operation, or routine maintenance and repair of items, components, or processes delivered or furnished for use under this agreement; and
- (iv) All other data delivered under this agreement unless provided otherwise for protected data in accordance with paragraph (g) of this clause or for limited rights data or restricted computer software in accordance with paragraph (h) of this clause.

(2) The Recipient shall have the right to –

- (i) Protect rights in protected data delivered under this agreement in the manner and to the extent provided in paragraph (g) of this clause;
- (ii) Withhold from delivery those data which are limited rights data or restricted computer software to the extent provided in paragraph (h) of this clause;
- (iii) Substantiate use of, add, or correct protected rights or copyrights notices and to take other appropriate action, in accordance with paragraph (e) of this clause; and
- (iv) Establish claim to copyright subsisting in data first produced in the performance of this agreement to the extent provided in subparagraph (c)(1) of this clause.

(c) Copyright

(1) Data first produced in the performance of this agreement. Except as otherwise specifically provided in this agreement, the Recipient may establish, without the prior approval of the Contracting Officer, claim to copyright subsisting in any data first produced in the performance of this agreement. If claim to copyright is made, the Recipient shall affix the applicable copyright notice of 17 U.S.C. 401 or 402 and acknowledgment of Government sponsorship (including agreement number) to the data when such data are delivered to the Government, as well as when the data are published or deposited for registration as a published work in the U.S. Copyright Office. For such copyrighted data, including computer software, the Recipient grants to the Government, and others acting on its behalf, a paid-up nonexclusive, irrevocable, worldwide license to reproduce, prepare derivative works, distribute copies to the public, and perform publicly and display publicly, by or on behalf of the Government, for all such data.

(2) Data not first produced in the performance of this agreement. The Recipient shall not, without prior written permission of the Contracting Officer, incorporate in data delivered under this agreement any

data that are not first produced in the performance of this agreement and that contain the copyright notice of 17 U.S.C. 401 or 402, unless the Recipient identifies such data and grants to the Government, or acquires on its behalf, a license of the same scope as set forth in subparagraph (c)(1) of this clause; provided, however, that if such data are computer software, the Government shall acquire a copyright license as set forth in subparagraph (h)(3) of this clause if included in this agreement or as otherwise may be provided in a collateral agreement incorporated or made a part of this agreement.

- (3) Removal of copyright notices. The Government agrees not to remove any copyright notices placed on data pursuant to this paragraph (c), and to include such notices on all reproductions of the data.

(d) Release, Publication and Use of Data

- (1) The Recipient shall have the right to use, release to others, reproduce, distribute, or publish any data first produced or specifically used by the Recipient in the performance of this contract, except to the extent such data may be subject to the Federal export control or national security laws or regulations, or unless otherwise provided in this paragraph of this clause or expressly set forth in this contract.
- (2) The Recipient agrees that to the extent it receives or is given access to data necessary for the performance of this agreement which contain restrictive markings, the Recipient shall treat the data in accordance with such markings unless otherwise specifically authorized in writing by the Contracting Officer.

(e) Unauthorized Marking of Data

- (1) Notwithstanding any other provisions of this agreement concerning inspection or acceptance, if any data delivered under this agreement are marked with the notices specified in subparagraph (g)(2) or (g)(3) of this clause and use of such is not authorized by this clause, or if such data bears any other restrictive or limiting markings not authorized by this agreement, the Contracting Officer may at any time either return the data to the Recipient or cancel or ignore the markings. However, the following procedures shall apply prior to canceling or ignoring the markings.
 - (i) The Contracting Officer shall make written inquiry to the Recipient affording the Recipient 30 days from receipt of the inquiry to provide written justification to substantiate the propriety of the markings;
 - (ii) If the Recipient fails to respond or fails to provide written justification to substantiate the propriety of the markings within the 30-day period (or a longer time not exceeding 90 days approved in writing by the Contracting Officer for good cause shown), the Government shall have the right to cancel or ignore the markings at any time after said period and the data will no longer be made subject to any disclosure prohibitions.
 - (iii) If the Recipient provides written justification to substantiate the propriety of the markings within the period set in subdivision (e)(1)(i) of this clause, the Contracting Officer shall consider such written justification and determine whether or not the markings are to be cancelled or ignored. If the Contracting Officer determines that the markings are authorized, the Recipient shall be so notified in writing. If the Contracting Officer determines, with concurrence of the head of the contracting activity, that the markings are not authorized, the Contracting Officer shall furnish the Recipient a written determination, which determination shall become the final agency decision regarding the appropriateness of the markings unless the Recipient files suit in a court of competent jurisdiction within 90 days of receipt of the Contracting Officer's decision. The Government shall continue to abide by the markings under this subdivision (e)(1)(iii) until final resolution of the matter either by the Contracting Officer's determination become final (in which instance the Government shall thereafter have the right to cancel or ignore the markings at any time and the data will no longer be made subject to any disclosure prohibitions), or by final disposition of the matter by court decision if suit is

filed.

- (2) The time limits in the procedures set forth in subparagraph (e)(1) of this clause may be modified in accordance with agency regulations implementing the Freedom of Information Act (5 U.S.C. 552) if necessary to respond to a request thereunder.

(f) Omitted or Incorrect Markings

- (1) Data delivered to the Government without either the limited rights or restricted rights notice as authorized by paragraph (g) of this clause, or the copyright notice required by paragraph (c) of this clause, shall be deemed to have been furnished with unlimited rights, and the Government assumes no liability for the disclosure, use, or reproduction of such data. However, to the extent the data has not been disclosed without restriction outside the Government, the Recipient may request, within 6 months (or a longer time approved by the Contracting Officer for good cause shown) after delivery of such data, permission to have notices placed on qualifying data at the Recipient's expense, and the Contracting Officer may agree to do so if the Recipient –

- (i) Identifies the data to which the omitted notice is to be applied;
- (ii) Demonstrates that the omission of the notice was inadvertent;
- (iii) Establishes that the use of the proposed notice is authorized; and
- (iv) Acknowledges that the Government has no liability with respect to the disclosure, use, or reproduction of any such data made prior to the addition of the notice or resulting from the omission of the notice.

- (2) The Contracting Officer may also:

- (i) Permit correction at the Recipient's expense of incorrect notices if the Recipient identifies the data on which correction of the notice is to be made, and demonstrates that the correct notice is authorized; or
- (ii) Correct any incorrect notices.

(g) Rights to Protected Data

- (1) The Recipient may, with the concurrence of DOE, claim and mark as protected data, any data first produced in the performance of this award that would have been treated as a trade secret if developed at private expense. Any such claimed "protected data" will be clearly marked with the following Protected Rights Notice, and will be treated in accordance with such Notice, subject to the provisions of paragraphs (e) and (f) of this clause.

PROTECTED RIGHTS NOTICE

These protected data were produced under agreement no. ____ with the U.S. Department of Energy and may not be published, disseminated, or disclosed to others outside the Government until [NOTE:] THE PERIOD OF PROTECTION OF SUCH DATA IS FULLY NEGOTIABLE, BUT CANNOT EXCEED THE APPLICABLE STATUTORILY AUTHORIZED MAXIMUM, UNLESS EXPRESS WRITTEN AUTHORIZATION IS OBTAINED FROM THE RECIPIENT.] Upon expiration of the period of protection set forth in this Notice, the Government shall have unlimited rights in this data. This Notice shall be marked on any reproduction of this data, in whole or in part.

(End of notice).

- (2) Any such marked Protected Data may be disclosed under obligations of confidentiality for the following purposes:
- (i) For evaluation purposes under the restriction that the "Protected Data" be retained in confidence and not be further disclosed; or
 - (ii) To subcontractors or other team members performing work under the Government's (insert name of program or other applicable activity) program of which this award is a part, for information or use in connection with the work performed under their activity, and under the restriction that the Protected Data be retained in confidence and not be further disclosed.
- (3) The obligations of confidentiality and restrictions on publication and dissemination shall end for any Protected Data.
- (i) At the end of the protected period;
 - (ii) If the data becomes publicly known or available from other sources without a breach of the obligation of confidentiality with respect to the Protected Data;
 - (iii) If the same data is independently developed by someone who did not have access to the Protected Data and such data is made available without obligations of confidentiality; or
 - (iv) If the Recipient disseminates or authorizes another to disseminate such data without obligations of confidentiality.
- (4) However, the Recipient agrees that the following types of data are not considered to be protected and shall be provided to the Government when required by this award without any claim that the data are Protected Data. The parties agree that notwithstanding the following lists of types of data, nothing precludes the Government from seeking delivery of additional data in accordance with this award, or from making publicly available additional non-protected data, nor does the following list constitute any admission by the Government that technical data not on the list is Protected Data. **(NOTE: IT IS EXPECTED THAT THIS PARAGRAPH WILL SPECIFY CERTAIN TYPES OF MUTUALLY AGREED UPON DATA THAT WILL BE AVAILABLE TO THE PUBLIC AND WILL NOT BE ASSERTED BY THE RECIPIENT/CONTRACTOR AS LIMITED RIGHTS OR PROTECTED DATA).**
- (5) The Government's sole obligation with respect to any protected data shall be as set forth in this paragraph (g).

(h) Protection of Limited Rights Data

When data other than that listed in subparagraphs (b)(1)(i), (ii), and (iii) of this clause are specified to be delivered under this agreement and such data qualify as either limited rights data or restricted computer software, the Recipient, if the Recipient desires to continue protection of such data, shall withhold such data and not furnish them to the Government under this agreement. As a condition to this withholding the Recipient shall identify the data being withheld and furnish form, fit, and function data in lieu thereof.

(i) Subaward/Contract

The Recipient has the responsibility to obtain from its subrecipients/contractors all data and rights therein necessary to fulfill the Recipient's obligations to the Government under this agreement. If a subrecipient/contractor refuses to accept terms affording the Government such rights, the Recipient shall promptly bring such refusal to the attention of the Contracting Officer and not proceed with subaward/contract award without further authorization.

(j) Additional Data Requirements

In addition to the data specified elsewhere in this agreement to be delivered, the Contracting Officer may, at anytime during agreement performance or within a period of 3 years after acceptance of all items to be delivered under this agreement, order any data first produced or specifically used in the performance of this agreement. This clause is applicable to all data ordered under this subparagraph. Nothing contained in this subparagraph shall require the Recipient to deliver any data the withholding of which is authorized by this clause or data which are specifically identified in this agreement as not subject to this clause. When data are to be delivered under this subparagraph, the Recipient will be compensated for converting the data into the prescribed form, for reproduction, and for delivery.

- (k) The Recipient agrees, except as may be otherwise specified in this agreement for specific data items listed as not subject to this paragraph, that the Contracting Officer or an authorized representative may, up to three years after acceptance of all items to be delivered under this contract, inspect at the Recipient's facility any data withheld pursuant to paragraph (h) of this clause, for purposes of verifying the Recipient's assertion pertaining to the limited rights or restricted rights status of the data or for evaluating work performance. Where the Recipient whose data are to be inspected demonstrates to the Contracting Officer that there would be a possible conflict of interest if the inspection were made by a particular representative, the Contracting Officer shall designate an alternate inspector.

APPLICABLE IF THE GOVERNMENT WANTS TO OBTAIN THE DELIVERY OF LIMITED RIGHTS DATA

RIGHTS IN DATA - GENERAL (ALTERNATE D) (OCT 2003)

(g)(2) Notwithstanding subparagraph (g)(1) of this clause, the agreement may identify and specify the delivery of limited rights data, or the Contracting Officer may require by written request the delivery of limited rights data that has been withheld or would otherwise be withholdable. If delivery of such data is so required, the Recipient may affix the following "Limited Rights Notice" to the data and the Government will thereafter treat the data, in accordance with such Notice:

LIMITED RIGHTS NOTICE

- (a) These data are submitted with limited rights under Government agreement No. [____] (and subaward/contract No. ____, if appropriate). These data may be reproduced and used by the Government with the express limitation that they will not, without written permission of the Recipient, be used for purposes of manufacture nor disclosed outside the Government; except that the Government may disclose these data outside the Government for the following purposes, if any, provided that the Government makes such disclosure subject to prohibition against further use and disclosure:
- (1) Use (except for manufacture) by Federal support services contractors within the scope of their contracts;
 - (2) This "limited rights data" may be disclosed for evaluation purposes under the restriction that the "limited rights data" be retained in confidence and not be further disclosed;
 - (3) This "limited rights data" may be disclosed to other contractors participating in the Government's program of which this Recipient is a part for information or use (except for manufacture) in connection with the work performed under their awards and under the restriction that the "limited rights data" be retained in confidence and not be further disclosed;
 - (4) This "limited rights data" may be used by the Government or others on its behalf for emergency repair or overhaul work under the restriction that the "limited rights data" be retained in confidence and not be further disclosed; and
 - (5) Release to a foreign government, or instrumentality thereof, as the interests of the United States Government may require, for information or evaluation, or for emergency repair or overhaul work by

such government. This Notice shall be marked on any reproduction of this data in whole or in part.

(b) This Notice shall be marked on any reproduction of these data, in whole or in part.

(End of notice)

**APPLICABLE IF THE GOVERNMENT WANTS TO OBTAIN THE DELIVERY OF RESTRICTED
COMPUTER SOFTWARE
RIGHTS IN DATA - GENERAL (ALTERNATE II) (OCT 2003)**

(g)(3)(i) Notwithstanding subparagraph (g)(1) of this clause, the agreement may identify and specify the delivery of restricted computer software, or the Contracting Officer may require by written request the delivery of restricted computer software that has been withheld or would otherwise be withholdable. If delivery of such computer software is so required, the Recipient may affix the following "Restricted Rights Notice" to the computer software and the Government will thereafter treat the computer software, subject to paragraphs (e) and (f) of this clause, in accordance with the Notice.

RESTRICTED RIGHTS NOTICE

(a) This computer software is submitted with restricted rights under Government Agreement No. ____ (and subaward/contract ____, if appropriate). It may not be used, reproduced, or disclosed by the Government except as provided in paragraph (b) of this Notice or as otherwise expressly stated in the agreement.

(b) This computer software may be –

- (1) Used or copies for use in or with the computer or computers for which it was acquired, including use at any Government installation to which such computer or computers may be transferred;
- (2) Used or copied for use in a backup computer if any computer for which it was acquired is inoperative;
- (3) Reproduced for safekeeping (archives) or backup purposes;
- (4) Modified, adapted, or combined with other computer software, provided that the modified, combined, or adapted portions of the derivative software are made subject to the same restricted rights;
- (5) Disclosed to and reproduced for use by support service Recipients in accordance with subparagraph (b)(1) through (4) of this clause, provided the Government makes such disclosure or reproduction subject to these restricted rights; and
- (6) Used or copied for use in or transferred to a replacement computer.

(c) Notwithstanding the foregoing, if this computer software is published copyrighted computer software, it is licensed to the Government, without disclosure prohibitions, with the minimum rights set forth in paragraph (b) of this clause.

(d) Any other rights or limitations regarding the use, duplication, or disclosure of this computer software are to be expressly stated, in, or incorporated in, the agreement.

(e) This Notice shall be marked on any reproduction of this computer software, in whole or in part.

(End of notice)

(ii) Where it is impractical to include the Restricted Rights Notice on restricted computer software, the following short-form Notice may be used in lieu thereof:

RESTRICTED RIGHTS NOTICE

Use, reproduction, or disclosure is subject to restrictions set forth in agreement No. ____ (and subaward/contract ____, If appropriate) with ____ (name of Recipient and subrecipient/contractor).

(End of notice)

- (iii) If restricted computer software is delivered with the copyright notice of 17 U.S.C. 401, it will be presumed to be published copyrighted computer software licensed to the government without disclosure prohibitions, with the minimum rights set forth in paragraph (b) of this clause, unless the Recipient includes the following statement with such copyright notice: "Unpublished -- rights reserved under the Copyright Laws of the United States."

APPLICABLE TO AWARDS PRIMARILY FOR THE PRODUCTION OR COMPILATION OF DATA FOR THE GOVERNMENT'S OWN USE

52.227-17 RIGHTS IN DATA - SPECIAL WORKS. (JUN 1987)

(a) Definitions.

"Data," as used in this clause, means recorded information regardless of form or the medium on which it may be recorded. The term includes technical data and computer software. The term does not include information incidental to contract administration, such as financial, administrative, cost or pricing or management information.

"Unlimited rights," as used in this clause, means the right of the Government to use, disclose, reproduce, prepare derivative works, distribute copies to the public, and perform publicly and display publicly, in any manner and for any purpose whatsoever, and to have or permit others to do so.

(b) Allocation of Rights.

(1) The Government shall have –

- (i) Unlimited rights in all data delivered under this contract, and in all data first produced in the performance of this contract, except as provided in paragraph (c) of this clause for copyright.
- (ii) The right to limit exercise of claim to copyright in data first produced in the performance of this contract, and to obtain assignment of copyright in such data, in accordance with subparagraph (c)(1) of this clause.
- (iii) The right to limit the release and use of certain data in accordance with paragraph (d) of this clause.

- (2) The Contractor shall have, to the extent permission is granted in accordance with subparagraph (c)(1) of this clause, the right to establish claim to copyright subsisting in data first produced in the performance of this contract.

(c) Copyright –

(1) Data first produced in the performance of this contract.

- (i) The Contractor agrees not to assert, establish, or authorize others to assert or establish, any claim to copyright subsisting in any data first produced in the performance of this contract without prior written permission of the Contracting Officer. When claim to copyright is made, the Contractor shall affix the appropriate copyright notice of 17

U.S.C. 401 or 402 and acknowledgment of Government sponsorship (including contract number) to such data when delivered to the Government, as well as when the data are published or deposited for registration as a published work in the U.S. Copyright Office. The Contractor grants to the Government and others acting on its behalf, a paid-up nonexclusive, irrevocable, worldwide license for all such data to reproduce, prepare derivative works, distribute copies to the public, and perform publicly and display publicly, by or on behalf of the Government.

- (ii) If the Government desires to obtain copyright in data first produced in the performance of this contract and permission has not been granted as set forth in subdivision (c)(1)(i) of this clause, the Contracting Officer may direct the Contractor to establish, or authorize the establishment of, claim to copyright in such data and to assign, or obtain the assignment of, such copyright to the Government or its designated assignee.

(2) *Data not first produced in the performance of this contract.* The Contractor shall not, without prior written permission of the Contracting Officer, incorporate in data delivered under this contract any data not first produced in the performance of this contract and which contain the copyright notice of 17 U.S.C. 401 or 402, unless the Contractor identifies such data and grants to the Government, or acquires on its behalf, a license of the same scope as set forth in subparagraph (c)(1) of this clause.

- (d) *Release and use restrictions.* Except as otherwise specifically provided for in this contract, the Contractor shall not use for purposes other than the performance of this contract, nor shall the Contractor release, reproduce, distribute, or publish any data first produced in the performance of this contract, nor authorize others to do so, without written permission of the Contracting Officer.
- (e) *Indemnity.* The Contractor shall indemnify the Government and its officers, agents, and employees acting for the Government against any liability, including costs and expenses, incurred as the result of the violation of trade secrets, copyrights, or right of privacy or publicity, arising out of the creation, delivery, publication, or use of any data furnished under this contract; or any libelous or other unlawful matter contained in such data. The provisions of this paragraph do not apply unless the Government provides notice to the Contractor as soon as practicable of any claim or suit, affords the Contractor an opportunity under applicable laws, rules, or regulations to participate in the defense thereof, and obtains the Contractor's consent to the settlement of any suit or claim other than as required by final decree of a court of competent jurisdiction; nor do these provisions apply to material furnished to the Contractor by the Government and incorporated in data to which this clause applies.

APPLICABLE TO R&D AWARDS TO FOR-PROFIT ENTITIES IN WHICH THE RECIPIENT HAS CERTIFIED THAT IT WILL BE USING LIMITED RIGHTS DATA IN THE PERFORMANCE OF THE WORK

LIMITED RIGHTS DATA (JAN 2004)

1. The limited rights data subject to the "Rights in Data" clause in this award are listed below [OR in Attachment [] attached hereto and made a part hereof]. This listing of data, which are asserted by the Recipient to be limited rights data, does not constitute an admission by the Government that the data is in fact limited rights data.

[RECIPIENT TO IDENTIFY/CERTIFY SPECIFIC DATA ASSERTED TO BE PROPRIETARY]

2. If a patent is issued by the United States Patent and Trademark Office or the patent office of any foreign country based on any information asserted to be limited rights data, the Government will no longer treat any data contained in such issued patent as limited rights data. In addition, if any information asserted to be limited rights data results in or becomes a Subject Invention, as that term is defined in the patent rights clause of this agreement, the Government will only treat such data as limited rights data until the Recipient has filed its initial patent application.
3. The Recipient shall not introduce or utilize any limited rights data not identified in paragraph (1) above in the

performance of the award without the expressed written permission of the Contracting Officer.

4. Minimum technical data deliverable with unlimited rights. Notwithstanding any other provision of this award, the following technical data first produced under this award as a minimum, shall be delivered to the DOE with unlimited rights:

[DOE PROJECT OFFICER TO SPECIFY WHAT DATA S/HE WANTS TO HAVE DELIVERED WITH UNLIMITED RIGHTS]

APPLICABLE TO R&D AWARDS TO FOR-PROFIT ENTITIES IN WHICH THE RECIPIENT HAS CERTIFIED THAT IT WILL BE USING RESTRICTED COMPUTER SOFTWARE IN THE PERFORMANCE OF THE WORK
RESTRICTED COMPUTER SOFTWARE (JAN 2004)

The restricted computer software subject to the provisions of the “Rights in Data” clause in this agreement are listed below. This list of software programs, which are asserted by the Recipient to be restricted computer software, does not constitute an admission by the Government that the software is in fact restricted computer software.

[RECIPIENT TO IDENTIFY/CERTIFY SPECIFIC SOFTWARE ASSERTED TO BE PROPRIETARY (STATEMENT FROM RECIPIENT)]

The Recipient shall not introduce or utilize any restricted computer software not identified above without advance written notification of the Contracting Officer.

APPLICABLE WHEN THE CLAUSE “RIGHTS IN DATA PROGRAMS COVERED UNDER SPECIAL DATA STATUTES” IS INCLUDED IN THE AWARD
PROTECTED DATA (JAN 2004)

The following is [OR Attachment [] contains] a listing of data anticipated to be generated under this award that the Recipient expects will qualify as “Protected Data,” as that term is defined in the “Rights in Data” clause in this award. Incorporating this listing of data into this agreement does not constitute a guarantee by the Government that the data will in fact qualify for this designation.

[RECIPIENT TO IDENTIFY DATA EXPECTED TO QUALIFY AS PROTECTED DATA]

If a patent is issued by the United States Patent and Trademark Office or the patent office of any foreign country based on any information asserted to be Protected Data, the Government will no longer treat any data contained in such issued patent as Protected Data. In addition, if any information asserted to be Protected Data results in or becomes a Subject Invention, as that term is defined in the patent rights clause of this agreement, the Government will only treat such data as Protected Data until the Recipient has filed its initial patent application.

APPLICABLE TO R&D AWARDS TO FOR-PROFIT ENTITIES
52.227-23 RIGHTS TO PROPOSAL DATA (TECHNICAL). (JUN 1987)

Except for data contained on pages [], it is agreed that as a condition of award of this contract, and notwithstanding the conditions of any notice appearing thereon, the Government shall have unlimited rights (as defined in the “Rights in Data - General” clause contained in this contract) in and to the technical data contained in the proposal dated [], upon which this contract is based.

SECTION IV - LIST OF ATTACHMENTS

Attachment A -- Statement of Project Objectives

Attachment B -- Federal Assistance Reporting Checklist

Attachment C -- Budget Page(s)

Attachment [] -- Recipient Acquired Property

Attachment [] -- Federally Owned Property -- Government Furnished

ATTACHMENT A -- STATEMENT OF PROJECT OBJECTIVES

[The negotiated Statement of Project Objectives will be inserted here. The format should be similar to the following.]

- A. Objectives
- B. Scope of Project
- C. Tasks to Be Performed
- D. Deliverables

The Recipient shall provide reports in accordance with the enclosed Federal Assistance Reporting Checklist and the instructions accompanying the Checklist. In addition to the reports identified on the Reporting Checklist, the Recipient shall provide the following:

[]

THE FOLLOWING CLAUSES CORRESPOND WITH THE REPORTS INDICATED IN THE CHECKLIST AND WILL BE INCLUDED IF REQUIRED UNDER THE AWARD. THE CONTRACT SPECIALIST SHOULD REMOVE THE CLAUSES BELOW THAT ARE NOT REQUIRED.

GENERAL INSTRUCTIONS FOR THE PREPARATION AND SUBMISSION OF REPORTS (JULY 2004)

The Recipient shall prepare and submit (postage prepaid) the reports indicated on the “Federal Assistance Reporting Checklist” to:

**NETL AAD DOCUMENT CONTROL
BLDG. 921
U. S. DEPARTMENT OF ENERGY
NATIONAL ENERGY TECHNOLOGY LABORATORY
P. O. BOX 10940
PITTSBURGH, PA 15236-0940**

Failure to follow these instructions can delay data entry of the report(s) into the **FEDERAL INFORMATION TRACKING SYSTEM** and result in the report being lost or considered delinquent.

The level of detail the Recipient provides in the reports shall be commensurate with the scope and complexity of the effort and shall be as delineated in the guidelines and instructions contained herein. The prime Recipient shall be responsible for acquiring data from any contractors or sub recipients and ensuring that any information submitted is compatible with the requirements of the DOE.

I. MANAGEMENT REPORTING

PROGRESS REPORT

The Progress Report must provide a concise narrative assessment of the status of work and include the following information:

1. The DOE award number and name of the recipient.
2. The project title and name of the project director/principal investigator.
3. Date of report and period covered by the report.
4. Executive Summary- A well organized summary that highlights the important accomplishments and new knowledge realized from the project during the reporting period. It should be no less than one page and no more than two pages in length, and should be single spaced. This summary must be more comprehensive than the traditional “abstract” and identify noteworthy advancements in research, design, manufacture or commercialization of technology developments. Also, summarize important breakthroughs that resolve critical science and technology risks or development barriers.
5. Results of work during reporting period- A detailed discussion of the progress performance. The format will be determined by the DOE Project Officer. (This section should not contain any proprietary or classified data, or other information not subject to public release. If such information is important to reporting progress, follow the instructions under Paragraph B.3. on page 5 below-Supplemental Guidelines regarding submission of a separate appendix for this type of restricted data.). A suggested format is:

Approach - this should describe, or reference all experimental, analytical and fabrication methods being used for the research and development efforts. It should also provide detail about materials and equipment being used. Standard methods can be referenced to the appropriate literature, where details can be obtained. Equipment should be described only if it is not standard, or if information is not available through the literature or other reference publications.

Results and Discussion - It is extremely important that this section includes enough relevant data, especially statistical data, to allow the project manager to justify the conclusions. With the relevant data, explain how the data was interpreted and how it relates to the original purpose of the research. Be concise in the discussion on how this research effort solved or contributed to solving the original problem. When investigation methods and/or procedures are being utilized for the first time, they shall be described in detail. This description shall contain detailed information on equipment and procedures utilized, as well as providing a rationale for their use and the accuracy of the method.

Conclusion - The conclusion should not simply reiterate what was already included in the "Results and Discussion" section. It should, however, summarize what has already been presented, and include any logical implications of how the successes are relevant to technology development in the future. This is extremely important, since "relevancy" continues to be a criterion of the program.

This section should not contain any trade secrets, business sensitive or classified data, or other information not subject to public release. If such information is important to reporting project progress, it should be presented in a separate appendix, as requested by the DOE Project Officer.

6. Milestones that were not met during the reporting period and reasons why the established milestones were not met. Explanations should also provide an approximate date when the milestone will be met.
7. Cost and schedule status. Cost Status - show approved budget by budget period and actual costs incurred. If cost sharing is required break out by DOE share, awardee share, and total costs. Schedule Status - list milestones, anticipated completion dates and actual completion dates. Awardees may use project management software, such as Microsoft Project, to measure and report cost and schedule status.
8. A summary of all of the significant accomplishments during this reporting period. An "accomplishment" is a significant development or finding that advances the state-of-the-art with respect to the technology of interest or significantly contributes to the understanding of a concept or technology.
9. Actual or anticipated problems or delays and actions taken or planned to resolve them. Identify any event causing a significant schedule slippage or cost growth; an environmental, safety, or health violation; or the achievement of or problems encountered for an important performance objective.
10. A description of any technology transfer activities accomplished during this reporting period. Identify and describe any activities to transfer research results or developed technology to other research stakeholders or users of the technology.

SPECIAL STATUS REPORT

The recipient must report the following events to the DOE Project Officer by e-mail as soon as possible after they occur: The e-mail correspondence should include:

1. Recipient's name and address;
2. Award title and number;
3. Date;
4. Brief statement of problem or event;
5. Anticipated impacts; and
6. Corrective action taken or recommended.

The Special Status Report should document the incidents listed below:

1. Developments that have a significant favorable impact on the project.
2. Problems, delays, or adverse conditions which materially impair the recipient's ability to meet the objectives of the award or which may require DOE to respond to questions relating to such events from the public. The recipient must report any of the following incidents and include the anticipated impact and remedial action to be taken to correct or resolve the problem/condition:
 - a. Any single fatality or injuries requiring hospitalization of five or more individuals.
 - b. Any significant environmental permit violation.
 - c. Any verbal or written Notice of Violation of any Environmental, Safety, and Health statutes.
 - d. Any incident which causes a significant process or hazard control system failure.
 - e. Any event which is anticipated to cause a significant schedule slippage or cost increase.
 - f. Any damage to Government-owned equipment in excess of \$50,000.
 - g. Any other incident that has the potential for high visibility in the media.
 - h. Any incident which causes a significant process or hazard control system failure, or is indicative of one which may lead to any of the above defined incidents, is to be reported as soon as possible, but within 5 days of discovery.

When an event results in the need to issue a written or verbal statement to the local media, the statement is to be cleared first; if possible, and coordinated with NETL Communications and Public Affairs Division, the DOE Project Officer and the Contracting Officer.

II. SCIENTIFIC/TECHNICAL REPORTING

Scientific/Technical Reporting includes: Final Scientific/Technical Report, Topical Reports, Journal Articles, Conference Proceedings and Papers, Software, and Conference Records.

FINAL SCIENTIFIC/TECHNICAL REPORT

The Final Scientific/Technical Report shall document and summarize all work performed during the award period in a comprehensive manner. It shall also present findings and/or conclusions produced as a consequence of this work. This report shall not merely be a compilation of information contained in other reports, but shall present that information in an integrated fashion, and shall be augmented with findings and conclusions drawn from the research as a whole.

TOPICAL REPORTS

Topical reports are intended to provide a comprehensive statement of the technical results of the work performed for a specific task or subtask of the Statement of Project Objectives, or detail significant new scientific or technical advances. If required, DOE shall review and approve the report outline prior to submission of the report.

GUIDELINES FOR ORGANIZATION OF FINAL SCIENTIFIC/TECHNICAL AND TOPICAL REPORTS

The following sections should be included (as appropriate) in the final scientific/technical report and topical reports in the sequence shown. Any section denoted by an asterisk is required in all technical

reports.

TITLE PAGE* - The Title Page of the report itself must contain the following information in the following sequence:

Report Title

Type of Report (Final Scientific/Technical or Topical)

Reporting Period Start Date

Reporting Period End Date

Principal Author(s)

Date Report was Issued (Month [spelled out] and Year [4 digits])

DOE Award Number (e.g., DE-FG26-04NT12345) and if appropriate, task number

Name and Address of Submitting Organization (This section should also contain the name and address of significant subcontractors/sub-recipients participating in the production of the report.)

DISCLAIMER* -- The Disclaimer must follow the title page, and must contain the following paragraph:

“This report was prepared as an account of work sponsored by an agency of the United States Government. Neither the United States Government nor any agency thereof, nor any of their employees, makes any warranty, express or implied, or assumes any legal liability or responsibility for the accuracy, completeness, or usefulness of any information, apparatus, product, or process disclosed, or represents that its use would not infringe privately owned rights. Reference herein to any specific commercial product, process, or service by trade name, trademark, manufacturer, or otherwise does not necessarily constitute or imply its endorsement, recommendation, or favoring by the United States Government or any agency thereof. The views and opinions of authors expressed herein do not necessarily state or reflect those of the United States Government or any agency thereof.”

ABSTRACT* - should be a brief, concise summary of the report.

TABLE OF CONTENTS*

EXECUTIVE SUMMARY* - this should be a well organized summary that highlights the important accomplishments of the research during the reporting period. It should be no less than one page and no more than two pages in length, and should be single spaced. This summary must be more comprehensive than the traditional “abstract.”

REPORT DETAILS - The body of the final scientific/technical or topical report should address topics such as the following:

Experimental methods: Describe, or reference all experimental methods being utilized. Also provide detail(s) about materials and equipment used. Standard methods should reference the appropriate literature, where details can be obtained. Equipment should be described only if it is not standard, or if information is not available thru the literature or other reference publications.

Results and discussions: This section should include enough relevant data, especially statistical data, to allow the project manager to justify the conclusions. Explain how the data was interpreted and how it relates to the original purpose of the research. Be concise in the discussion on how this research effort solved or contributed to solving the original problem.

Conclusion: The conclusion should not simply reiterate what was already included in “Results and Discussion” but should summarize what has already been presented, and

include any logical implications of how the successes are relevant to technology development in the future. This is extremely important, since “relevancy” continues to be a criterion of the program.

GRAPHICAL MATERIALS LIST(S)
REFERENCES
BIBLIOGRAPHY
LIST OF ACRONYMS AND ABBREVIATIONS
APPENDICES (IF NECESSARY)

SUPPLEMENTAL GUIDELINES

Technical reporting SHALL NOT include Limited Rights Data (such as restricted, proprietary or business sensitive information). Limited Rights Data shall be submitted in a separate appendix to the technical report. This appendix SHALL NOT be submitted in an electronic format but rather submitted in ONE ORIGINAL AND THREE (3) PAPER COPIES along with the paper version of the sanitized technical report deliverable. The appendix shall be referenced in, but not incorporated into, the sanitized technical report deliverable under the contract. The appendix must be appropriately marked and identified. Further, if this award authorizes the awardee under the provisions of The Energy Policy Act of 1992 to request protection from public disclosure for a limited period of time of certain information developed under this award, technical reports SHALL NOT contain such Protected EAct Information. Such information shall be submitted in a separate appendix to the technical report that is suitable for release after the agreed upon period of protection from public disclosure has expired. The appendix shall be referenced in, but not incorporated into, the sanitized technical report deliverable under the contract. In accordance with the clause titled “Obligations as to Protected Energy Policy Act (EAct) Information,” the appendix must be appropriately marked and identified

Company Names and Logos -- Except as indicated above, company names, logos, or similar material should not be incorporated into reports.

Copyrighted Material -- Copyrighted material should not be submitted as part of a report unless written authorization to use such material is received from the copyright owner and is submitted to DOE with the report.

Measurement Units -- All reports to be delivered under this instrument shall use the SI Metric System of Units as the primary units of measure. When reporting units in all reports, primary SI units shall be followed by their U.S. Customary Equivalents in parentheses (). **The Recipient shall insert the text of this clause, including this paragraph, in all subcontracts under this award.** Note: SI is an abbreviation for "Le Systeme International d'Unites."

ELECTRONIC MEDIA STANDARD FOR PREPARATION OF TECHNICAL REPORTS

PRESENTATION: The Recipient shall submit one quality permanent paper copy for storage (permanent or alkaline paper) and an electronic version of each technical report in PDF format. ELECTRONIC REPORTS MUST BE SUBMITTED IN THE ADOBE ACROBAT PORTABLE DOCUMENT FORMAT (PDF). REPORTS SUBMITTED IN A FORMAT OTHER THAN ADOBE WILL BE REJECTED, RETURNED AND CONSIDERED DELINQUENT. The report must be one complete integrated file containing all text, tables, diagrams, photographs, schematics, graphs, and charts. Multiple files for various report segments are unacceptable and will be rejected. The electronic file(s) may be submitted on an ISO9660-format CD-ROM.

FORMAT: The electronic file(s) must be submitted on CD-ROM and labeled as follows:

DOE Award Number
Type/Frequency of Report(s)
Reporting Period (if applicable)

Name of submitting organization
Name, phone number and fax number of preparer

INCLUDE IF THE AWARD IS TO A LARGE BUSINESS ORGANIZATION.

JOURNAL ARTICLES, CONFERENCE PAPERS AND PROCEEDINGS GENERATED BY LARGE BUSINESSES FOR DOE REVIEW

The Recipient shall submit to DOE for review and approval all documents generated by the Recipient, or any subcontractor, which communicate the results of scientific or technical work supported by DOE under this award, whether or not specifically identified in the award, prior to submission for publication, announcement, or presentation. Such documents include journal articles, conference papers and proceedings, etc. The Recipient shall simultaneously submit a draft version of the document to the DOE Project Officer and the DOE Patent Counsel Office prior to the publication, presentation, or announcement. The DOE Project Officer and DOE Patent Counsel shall review the draft version of the document and notify the Recipient of approval or recommended changes. The approved final version shall be submitted to the NETL AAD Document Control Coordinator.

The following information shall be provided for conference papers and proceedings, etc.

- Name of conference
- Location of conference (city, state, and country)
- Date of conference (month/day/year)
- Conference sponsor

INCLUDE IF THE AWARD IS TO A SMALL BUSINESS OR NON-PROFIT ORGANIZATION.

JOURNAL ARTICLES, CONFERENCE PAPERS AND PROCEEDINGS GENERATED BY A SMALL BUSINESS OR NONPROFIT ORGANIZATION FOR DOE REVIEW

The Recipient shall submit to DOE for review and approval all documents generated by the Recipient, or any subcontractor, which communicate the results of scientific or technical work supported by DOE under this award, whether or not specifically identified in the award, prior to submission for publication, announcement, or presentation. Such documents include journal articles, conference papers and proceedings, etc. The Recipient shall submit a draft version of the document to the DOE Project Officer prior to the publication, presentation, or announcement. The DOE Project Officer shall review the draft version of the document and notify the Recipient of approval or recommended changes. The final version shall be submitted to the NETL AAD Document Control Coordinator.

The following information shall be provided for conference papers and proceedings, etc.

- Name of conference
- Location of conference (city, state, and country)
- Date of conference (month/day/year)
- Conference sponsor

INCLUDE IF THE AWARD IS TO A UNIVERSITY OR EDUCATIONAL INSTITUTION.

JOURNAL ARTICLES, CONFERENCE PAPERS AND PROCEEDINGS GENERATED BY A UNIVERSITY FOR DOE REVIEW

The Recipient shall submit to DOE for review and comment all documents generated by the Recipient, or any subcontractor, which communicate the results of scientific or technical work supported by DOE under this award, whether or not specifically identified in the award, prior to submission for publication, announcement, or presentation. Such documents include journal articles, conference papers and proceedings, etc.

The Recipient shall submit a draft version of the document to the DOE Project Officer prior to the

publication, presentation, or announcement. The DOE Project Officer shall review the draft version of the document and notify the Recipient of recommended changes. The final version shall be submitted to the NETL AAD Document Control Coordinator.

The following information shall be provided for conference papers and proceedings, etc.

- Name of conference
- Location of conference (city, state, and country)
- Date of conference (month/day/year)
- Conference sponsor

INCLUDE IF SOFTWARE IS TO BE DELIVERED.

SOFTWARE

Computer software produced in the performance of this effort shall be delivered to the NETL shortly after development or at the completion of the effort, as appropriate. Unless otherwise agreed upon, the following shall be delivered: source code, the executable object code and support documentation needed by a competent user to understand and use the software and provide a firm basis for allowing modifications to be made in any subsequent development efforts. Unless otherwise specified, software should not incorporate or be dependent on the use of proprietary software. A copy of the software shall also be delivered to DOE's Energy Science and Technology Software Center, P.O. Box 1020, Oak Ridge, TN 37831, along with DOE Form 241.4.

INCLUDE IF A CONFERENCE RECORD IS NEEDED.

CONFERENCE RECORD

The "Conference Record" documents for the DOE Project Officer, DOE Contracting Officer, and the Recipient an understanding of significant decisions, direction or redirection, or required actions resulting from meetings with DOE representatives. It is required for any meeting, conference, or phone conversation in which a decision is made that may change the schedule, labor, cost, or technical aspects of the award or the approved baseline plans. The report shall contain the following information as applicable:

1. Report title ("Conference Record"), number, and the date prepared.
2. Award title and number, and the Recipient's name and address.
3. Date of meeting or telephone conversation, with a list of those involved and their titles.
4. Subject(s) discussed, decisions reached, and directions given.
5. Variances from previous directions and conclusions.
6. Required actions.
7. Distribution.
8. Signature of preparer.

III. FINANCIAL REPORTING

FINANCIAL STATUS REPORT (STANDARD FORM 269 OR 269A)

This report is used for the Recipient to provide regular periodic accounting of project funds expended. The accounting may be on either a cash or accrual basis. Actual total expenditures and obligations incurred, but not paid, are reported for each reporting period for each major activity. Provision is made to identify the Federal and non-Federal share of project outlays for each identified activity.

INCLUDE WHEN FUNDS ARE ADVANCED USING ASAP. DOE WILL USE THIS REPORT TO MONITOR CASH ADVANCED TO RECIPIENTS AND TO OBTAIN DISBURSEMENT INFORMATION FOR EACH AGREEMENT WITH THE RECIPIENTS.

FEDERAL CASH TRANSACTIONS REPORT (STANDARD FORM 272)

This report is used by DOE to monitor cash advanced to Recipients and to obtain disbursement

information. The content of the report is prescribed in 10 CFR 600.152 for Institutions of Higher Education, Hospitals, Other Non-Profit Organizations and Commercial Organizations or 10 CFR 600.241 for States and Local Governments.

IV. CLOSEOUT REPORTING

PATENT CERTIFICATION (DOE F 2050.11)

This certificate submitted on DOE F 2050.11 is due immediately upon completion or termination of the award.

PROPERTY CERTIFICATE (NETL F 580.1-9)

This certificate submitted on the NETL F 580.1-9 is due immediately upon completion or termination of the award.

INCLUDE THIS CLAUSE IF PROPERTY IS TO BE FURNISHED UNDER THE AWARD REPORT OF EXCESS PERSONAL PROPERTY (SF-120)

The SF-120 is required if there is Government-furnished property involved. The Recipient is required to perform and cause each subcontractor to perform a physical inventory, adequate for disposal purposes, of all Government property applicable to the award.

V. OTHER REPORTING

INCLUDE THIS CLAUSE IF PROPERTY IS TO BE FURNISHED UNDER THE AWARD ANNUAL REPORT OF PROPERTY IN THE CUSTODY OF CONTRACTORS (NETL F 580.1-8)

This report includes **ALL** Government-owned and Government-furnished property and materials for which the Recipient is accountable to the Government. This report shall also include Government Property at subcontractor's plants and alternate locations. This report is submitted on NETL F 580.1-8 for the period ending September 30 and is due by October 15.

INCLUDE THIS CLAUSE IF HIGH RISK PROPERTY IS INVOLVED. FOR A DEFINITION OF HIGH-RISK PROPERTY, REFER TO THE TEXT OF THE CLAUSE. HIGH RISK PROPERTY REPORT (NETL F 580.1-25)

Some property, because of its peculiar nature, its potential impact on public health and safety, on the environment, on security interests, or on proliferation concerns, must be handled, controlled, cleared and disposed of in other than the standard manner. High-risk property includes property which is: 1) nuclear-related; 2) proliferation-sensitive or export controlled; 3) chemically, biologically, or radiologically contaminated; 4) national security/military interests; and 5) hazardous materials and wastes. Further definitions of high-risk property can be found at <http://www1.pr.doe.gov/pp1003-1.wpd>. This report is required by the DOE for the control (acquisition, management and disposal) of high risk property to ensure that such disposition does not adversely affect public safety and/or the environment, national security, or nuclear nonproliferation objectives of the United States. This report shall be submitted for the period ending September 30 and is due by October 15 of each year.

INCLUDE THIS CLAUSE IF THE NEPA PROCESS HAS REQUIRED AN EIA OR AN EIS. (NOT GENERALLY USED) ENVIRONMENTAL REPORTS

In response, in part, to the requirements of the National Environmental Policy Act of 1969 (NEPA) and other related environmental statutes, the National Energy Technology Laboratory (NETL) requires the submission of various documents that assess the environmental aspects and projected impacts of all of its proposed actions. These documents may include the following: (1) Environmental Compliance Plan, (2)

Environmental Monitoring Plan, and (3) Environmental Status Reports.

The environmental information provided in these documents will enable NETL to fulfill its responsibilities under NEPA (additional information about the requirements of the National Environmental Policy Act can be found in the DOE NEPA Compliance Guide and 10 CFR 1021) and to monitor the Recipient's compliance with other environmental regulations. The implementation of any task associated with a proposed action will be dependent upon DOE completing necessary NEPA documentation. Therefore, to minimize the risk of project delays, it is imperative that these reports be submitted in a timely manner.

The information contained herein specifies the basic environmental requirements for this award, but it is not to be interpreted as containing all necessary information for any given project. Likewise, certain aspects of the requirements may not be applicable. Accordingly, the level of information provided should be sufficient for DOE to assess the environmental implications of the proposed action.

A. ENVIRONMENTAL COMPLIANCE PLAN

The Environmental Compliance Plan (ECP) should outline an approach to implementing an environmental monitoring and reporting strategy. This strategy should include plans for submitting a Quality Assurance/Quality Control Plan and Pollution Prevention Plan (if an ECP is required, the format of the QA/QC Plan and Pollution Prevention Act will be determined in conjunction with the NETL environmental staff), conducting environmental monitoring of the proposed action and submitting Environmental Status Reports. The ECP should also address any concerns and/or deviations associated with the reporting and monitoring documents.

SUGGESTED FORMAT FOR ENVIRONMENTAL COMPLIANCE PLAN (ECP):

- I. SUMMARY OF PROPOSED PROJECT
- II. FEDERAL REGULATORY COMPLIANCE (Discuss how each of the following will be complied with, if applicable.)
 - A. National Historic Preservation Act
 - B. Endangered Species Act
 - C. Fish and Wildlife Coordination Act
 - D. Floodplain/Wetlands Regulations
 - E. Coastal Zone Management Act
 - F. Farmland Protection Policy Act
 - G. American Indian Religious Freedom Act
 - H. Wild and Scenic Rivers Act
 - I. Resource Conservation & Recovery Act
 - J. Comprehensive Environmental Response, Compensation and Liability Act
 - K. Clean Air Act
 - L. Clean Water Act
 - M. Pollution Prevention Act
- III. STATE AND LOCAL REGULATORY COMPLIANCE (Discuss how any state and local regulations will be complied with.)

B. ENVIRONMENTAL MONITORING PLAN

IF DOE's analysis of the potential environmental impacts of the proposed action identifies a need for environmental monitoring, the Recipient will also submit a draft Environmental Monitoring Plan (EMP) within thirty (30) days of award. After consultation with DOE, the draft EMP will be revised, as necessarily and a final EMP will be prepared. The EMP may be revised as the project dictates.

The EMP should evaluate air, land, and water resources, and waste production, using three specific types of monitoring:

- A. Compliance Monitoring,
- B. Unregulated Pollutant Monitoring, and, if necessary,
- C. NEPA-related Monitoring.

Compliance monitoring, i.e., environmental and health monitoring required by Federal, State, and local regulatory agencies, should detail the location, frequency, duration, and substances being monitored. All necessary applications, permits, and licenses should be identified.

Unregulated pollutants, both the amount and type of each, should be monitored. This includes those pollutants (a) not currently regulated by State or Federal laws but for which new regulations are expected in the near future; (b) which may cause environmental or health concerns based on hazardous/toxic compound lists; and (c) which are expected in discharge streams based on test data or process chemistry.

Finally, NEPA-related monitoring should be implemented as necessary. It should identify and/or confirm the impacts of the substances produced and performance of the specific technologies as predicted in the NEPA document. It should also include reporting on any mitigation action identified in the Finding of No Significant Impact or Record of Decision as a condition of approval of the proposed action (reported annually).

C. ENVIRONMENTAL STATUS REPORT

After approval of the comprehensive EMP, and as deemed necessary by the DOE Project Manager, information from environmental monitoring should be submitted in the form of Environmental Status Reports (ESRs). The necessity of these reports will depend on the size and nature of the project; they will be required quarterly

The data reported in the ESRs will ensure that project impacts (a) do not violate applicable environmental regulations and (b) are not detrimental to human health or the environment. The information will also provide a database that can be utilized to mitigate environmental problems associated with commercializing any proposed technologies.

SUGGESTED FORMAT FOR ENVIRONMENTAL STATUS REPORTS

I. SUMMARY OF MONITORING PERFORMED (Compliance and Supplemental Monitoring)

A. MONITORING PARAMETERS

- 1. Location
- 2. Stage of Project (e.g., preconstruction, operational, etc.)
- 3. Source to be Monitored (e.g., stack emissions)
- 4. Method of Monitoring

B. DATA ANALYSIS

- 1. Identification/characterization of emissions, effluents, etc. and their concentration
- 2. Identification of problem areas/non-compliance
- 3. Suggestions for modifications/changes to the system
- 4. Recommendations to revise Monitoring Plan

II. PERMIT COMPLIANCE STATUS

- A. Attach copies of compliance reports, analyses, correspondence between the recipient and the appropriate regulatory agencies.
- B. Attach copies of all manifests, shipping documents, etc. pertaining to the disposal of Wastes generated from the project.

ATTACHMENT C – BUDGET PAGE(S)

DOE F 4600.4#
(09-92)
Replaces EIA-459CF
All Other Editions Are Obsolete

U.S. DEPARTMENT OF ENERGY
Federal Assistance Budget Information
OMB Burden Disclosure Statement

OMB Control No
1910-0400

Public reporting burden for this collection of information is estimated to average 1.87 hours per response, including the time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information. Send comments regarding this burden estimate or any other aspect of this collection of information, including suggestions for reducing this burden, to Office of Information Resources Management, AD-241.2 - GTN, Paperwork Reduction Project (1910-0400), U.S. Department of Energy, 1000 Independence Avenue, S.W., Washington, DC 20585; and to the Office of Management and Budget (OMB), Paperwork Reduction Project (1910-0400), Washington, DC 20503.

1. Program/Project Identification No.		2. Program/Project Title				
3. Name and Address					4. Program/Project Start Date	
					5. Completion Date	
SECTION A - BUDGET SUMMARY						
Grant Program Function or Activity (a)	Federal Catalog No. (b)	Estimated Unobligated Funds		New or Revised Budget		
		Federal	Non-Federal	Federal	Non-Federal	Total
1.						
2.						
3.						
4.						
5. TOTALS		\$	\$	\$	\$	\$
SECTION B - BUDGET CATEGORIES						
6. Object Class Categories	Grant Program, Function or Activity				Total (5)	
	(1)	(2)	(3)	(4)		
a. Personnel	\$	\$	\$	\$	\$	
b. Fringe Benefits						
c. Travel						
d. Equipment						
e. Supplies						
f. Contractual						
g. Construction						
h. Other						
i. Total Direct Charges						
j. Indirect Charges						
k. TOTALS	\$	\$	\$	\$	\$	
7. Program Income	\$	\$	\$	\$	\$	

THIS ATTACHMENT WILL BE INCLUDED IF THE RECIPIENT HAS PROPOSED TO ACQUIRE PROPERTY.

ATTACHMENT D -- RECIPIENT ACQUIRED PROPERTY

DESCRIPTION OF PROPERTY

ESTIMATED ACQUISITION COST

EQUIPMENT

[Insert a description and quantity of tangible, nonexpendable personal property charged directly to the award having a useful life of more than one year and an acquisition cost of \$5,000 or MORE per unit.]

NON-EXPENDABLE PROPERTY

[Insert a description and quantity of tangible, nonexpendable personal property charged directly to the award having a useful life of more than one year and an acquisition cost of LESS than \$5,000 per unit. DO NOT include expendable property (i.e. paper, pens, pencils, gases, chemicals, etc.)]

EXPENDABLE MATERIALS AND SUPPLIES

[Insert a summary of the types of tangible, expendable personal property charged directly to the award having a useful life of less than one year and an acquisition cost of \$5,000 or less per unit. List the types of items to be purchased and a sum of the acquisition cost of all items. DO NOT itemize.]

[Provide the same level of detail as shown above for all lower tier subrecipients or subcontractors.]

THIS ATTACHMENT WILL BE INCLUDED IF GOVERNMENT PROPERTY IS TO BE FURNISHED.
ATTACHMENT E -- FEDERALLY OWNED PROPERTY -- GOVERNMENT FURNISHED